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=> d his
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(FILE 'HOME' ENTERED AT 13:51:26 ON 17 DEC 2003)
                SET COST OFF
     FILE 'REGISTRY' ENTERED AT 13:51:48 ON 17 DEC 2003
                E C20H22CL2O4/MF
L1
               3 S E3 AND 46.150.18/RID AND OC4-C6/ES
                SEL RN
L2
              0 S E1-E3/CRN
     FILE 'HCAOLD' ENTERED AT 13:53:06 ON 17 DEC 2003
L3
              0 S L1
     FILE 'USPATFULL, USPAT2' ENTERED AT 13:53:07 ON 17 DEC 2003
L4
     FILE 'HCAPLUS' ENTERED AT 13:53:10 ON 17 DEC 2003
L5
              1 S L1
L6
              1 S (WO2000-EP9323 OR DE99-19948129)/AP, PRN
                E FISCHER R/AU
L7
           1150 S E3-E24
                E FISCHER REINER/AU
            154 S E3
^{18}
                E ERDELEN C/AU
            303 S E3, E4, E7-E11
L9
                E BAYER/PA, CS
          43841 S E3, E4
L10
L11
           2548 S BAYER?/PA,CS NOT L10
L12
              2 S L1, L6 AND L7-L11
                SEL RN
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            307 S E1-E307
L13
L14
            304 S L13 NOT L1
L15
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              1 S L14 AND NCSC2/ES AND NCNCOC/ES AND 2/NR
L16
              1 S L14 AND NCSC2/ES AND NC5/ES AND 2/NR
L17
L18
              1 S L14 AND NCSC2/ES AND NCNCNC/ES AND 2/NR
L19
              2 S L14 AND NC5/ES AND 1/NR AND 4/N AND 1/CL
                E C10H11CLN4/MF
              8 S E3 AND NC5/ES AND 1/NR
L20
              7 S L20 AND 6 CHLORO
L21
L22
              6 S L21 AND 3 PYRIDINYL METHYL
L23
              4 S L22 AND ETHANIMIDAMIDE
L24
              3 S L23 NOT T/ELS
L25
              2 S L24 NOT 162551-23-7
L26
              1 S L14 AND OC4/ES AND 1/NR AND 4/N
L27
              1 S L14 AND NCSC2/ES AND 1/NR AND 5/N AND 1/CL
L28
              9 S L15-L19, L25-L27
                SEL RN
L29
            505 S E1-E9/CRN
L30
              4 S L29 NOT MXS/CI
L31
              1 S L30 NOT C3/ES
L32
             10 S L28, L31
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L33
          1592 S L32
L34
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L35
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L36
            135 S AKD 1022 OR AKD1022 OR CGA322704 OR CGA()(322704 OR 322 704)
L37
            45 S ADMIRE
L38
          11747 S L33-L37
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L39
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L40
              1 S L6 AND L38
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L41
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L42
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L43
              1 S 332154-06-0
L44
                STR
             50 S L44
L45
L46
           1484 S L44 FUL
                SAV L46 LEVY089/A
     FILE 'HCAPLUS' ENTERED AT 14:13:07 ON 17 DEC 2003
            403 S L46
L47
L48
              8 S L47 AND L38
L49
              1 S L48 AND (PD<=19991007 OR PRD<=19991007 OR AD<=19991007)
L50
              1 S L48 AND (PD<=20000925 OR PRD<=20000925 OR AD<=20000925)
L51
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L52
              7 S L48 NOT L51
L53
             16 S SPIRODICLOFEN#
L54
             20 S L41
L55
              4 S L53, L54 AND L38
L56
              1 S L55 AND ACETYLCHOLINE RECEPTOR
L57
              2 S L51, L56 AND L5-L12, L33-L40, L47-L56
L58
            259 S L7-L11 AND L5, L6, L38, L53, L54, L47
L59
             6 S BAJ2740 OR BAJ 2740
L60
              0 S L59 AND L38
L61
            210 S L58 AND L38
              3 S L61 AND L47, L53, L54, L5
L62
              4 S L57, L62
L63
                SEL HIT RN
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            297 S E10-E306
L64
L65
              3 S L64 AND L1
L66
              8 S L64 AND L32
              2 S L32 NOT L66
L67
             10 S L66, L67
L68
L69
              1 S L64 AND L41
L70
            285 S L64 AND L46 NOT L65-L69
L71
            282 S L70 AND 1/NC
L72
              3 S L70 NOT L71
              2 S L72 AND MXS/CI
L73
     FILE 'HCAPLUS' ENTERED AT 14:26:47 ON 17 DEC 2003
L74
             1 S L73
              4 S L63, L74
L75
=> fil reg
FILE 'REGISTRY' ENTERED AT 14:27:10 ON 17 DEC 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)
Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.
STRUCTURE FILE UPDATES:
                          16 DEC 2003 HIGHEST RN 627482-61-5
DICTIONARY FILE UPDATES: 16 DEC 2003 HIGHEST RN 627482-61-5
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Please note that search-term pricing does apply when

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2003

=> => d his 176-

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(FILE 'USPATFULL, USPAT2' ENTERED AT 14:30:11 ON 17 DEC 20(
L76
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L77
               93 S L46
L78
                2 S L41
L79
                0 S L42, L43
L80
                9 S L53 OR L59
L81
              102 S L76-L80
L82
              260 S L32
L83
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L84
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L85
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L87
               41 S L86 AND SYNERG?
L88
                1 S L77 AND L82
L89
               0 S L85 AND L82
               43 S L85-L87 NOT L88
L90
=> fil uspatall
FILE 'USPATFULL' ENTERED AT 14:37:58 ON 17 DEC 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)
FILE 'USPAT2' ENTERED AT 14:37:58 ON 17 DEC 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)
=> d 188 bib abs hitrn hitstr
L88 ANSWER 1 OF 1 USPATFULL on STN
AN
        2003:282318 USPATFULL
TT
        Fibrous pest control
TN
        Hoffmann, Michael P., Ithaca, NY, UNITED STATES
        Gardner, Jeffrey, Hector, NY, UNITED STATES
        Curtis, Paul D., Ithaca, NY, UNITED STATES
PI
        US 2003198659
                             A1
                                   20031023
ΑI
        US 2002-281088
                             A1
                                    20021025 (10)
PRAI
        US 2001-345349P
                              20011025 (60)
DT
        Utility
FS
        APPLICATION
        SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A., P.O. BOX 2938, MINIS.
LREP
        MN, 55402
CLMN
        Number of Claims: 64
        Exemplary Claim: 1
DRWN
        4 Drawing Page(s)
LN.CNT 3638
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB
        The present invention provides fibrous pest deterrents that combthe
        useful properties of a physical barrier in the form of a non-wov
        fibrous matrix with a chemical deterrent such as a pesticide,
        behavior-modifying compound or a pest repellent. The use of suchprous
        pest deterrents protects plants, animals and structures in both
        agricultural and non-agricultural settings from damage inflicted,
        pests. Unlike traditional pesticides, the behavior-modifying compind,
       pesticide or chemical deterrent of the present invention is adsized or
       attached to a fibrous matrix, and so it is not so readily dispersed into
        the environment. Hence, use of the present fibrous pest deterrets can
       reduce the levels of pesticides that inadvertently contaminate non-target areas and pollute water supplies. The present figrous pest deterrents therefore help moderate in the use of pesticides in commercial agricultural and non-agricultural operations, how gardens, and the urban environment, alleviating public concerns about pesticide
       run-off, contamination of the environment and risks to human health.
```

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

153719-23-4, Thiamethoxam 165252-70-0, Dinotefuran 283594-90-1, Spiromesifen

(fiber-supported pesticidal composition)

153719-23-4, Thiamethoxam 165252-70-0, Dinotefuran 283594-90-1, Spiromesifen

(fiber-supported pesticidal composition)

RN 153719-23-4 USPATFULL

CN 4H-1,3,5-Oxadiazin-4-imine, 3-[(2-chloro-5-thiazolyl)methyl]tetrahydro-5methyl-N-nitro- (9CI) (CA INDEX NAME)

RN 165252-70-0 USPATFULL

CN Guanidine, N-methyl-N'-nitro-N''-[(tetrahydro-3-furanyl)methyl]- (9CI) (CA INDEX NAME)

$$\begin{array}{c|c}
\text{NHMe} \\
\text{CH}_2\text{-N} = \text{C-NH-NO}_2
\end{array}$$

RN 283594-90-1 USPATFULL

CN Butanoic acid, 3,3-dimethyl-, 2-oxo-3-(2,4,6-trimethylphenyl)-1oxaspiro[4.4]non-3-en-4-yl ester (9CI) (CA INDEX NAME)

=> d 190 bib abs hitrn fhitstr tot

L90 ANSWER 1 OF 43 USPATFULL on STN

AN2003:291161 USPATFULL

TI Biphenyl-substituted cyclic ketoenols as pesticides

IN Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Graff, Alan, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Drewes, Mark Wilhelm, Langenfeld, GERMANY, FEDERAL REPUBLIC OF

Feucht, Dieter, Monheim, GERMANY, FEDERAL REPUBLIC OF

PA Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

<--

PI US 6642180 B1 20031104 WO 2001009092 20010208

AI US 2002-48764 20020125 (10) WO 2000-EP6852 20000718

WO 2000-EP0052 20000

PRAI DE 1999-19935963 19990730

DT Utility FS GRANTED

EXNAM Primary Examiner: Kifle, Bruck; Assistant Examiner: McKenzie, Thomas

LREP Henderson, Richard E. L., Mrozinski, Jr., John E.

CLMN Number of Claims: 9 ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 3305

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel biphenyl-substituted cyclic ketoenols of the **formula** (I) ##STR1##

in which

W represents hydrogen, halogen, alkyl, alkoxy, alkenyloxy, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro or cyano,

X represents halogen, alkyl, alkoxy, alkenyloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro, cyano or in each case optionally substituted phenyl, phenoxy, phenylthio, phenylalkoxy or phenylalkylthio,

Y represents in each case optionally substituted cycloalkyl, aryl or hetaryl,

Z represents hydrogen, halogen, alkyl, alkoxy, halogenoalkyl or halogenoalkoxy,

CKE represents one of the groups ##STR2##

in which

A, B, D, L, M, Q.sup.1, Q.sup.2, Q.sup.3, Q.sup.4, Q.sup.5 and Q.sup.6 are as defined in the description,

to preparation and to their use as pesticides and herbicides.

# CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 322641-34-9P

(preparation of biphenyl-substituted cyclic ketoenol derivs. as herbicides and pesticides)

IT 322641-43-0

(preparation of biphenyl-substituted cyclic ketoenol derivs. as herbicides and pesticides)  $\ensuremath{\mathsf{S}}$ 

IT 322641-34-9P

(preparation of biphenyl-substituted cyclic ketoenol derivs. as herbicides and pesticides)

RN 322641-34-9 USPATFULL

CN 2(5H)-Furanone, 3-(4'-chloro-4-methyl[1,1'-biphenyl]-3-yl)-4-[(4-chlorophenoxy)methoxy]-5,5-dimethyl- (9CI) (CA INDEX NAME)

```
L90
     ANSWER 2 OF 43 USPATFULL on STN
AN
       2003:283228 USPATFULL
TI
       Alkyl-dihalogenophenyl-substituted ketoenols
       Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
IN
       Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
       Widdig, Arno, Odenthal, GERMANY, FEDERAL REPUBLIC OF
       Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF
       Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
       Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF
       Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
       Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF
       Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF
       Dollinger, Markus, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
       Santel, Hans-Joachim, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
       Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF
       Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF
       Mencke, Norbert, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
       Turberg, Andreas, Erkrath, GERMANY, FEDERAL REPUBLIC OF
                                20031023
PI
       US 2003199572
                           A1
                                 20011214 (10)
       US 2001-17695
                           Α1
ΑI
       Division of Ser. No. US 1999-404424, filed on 23 Sep 1999, PENDING Division of Ser. No. US 1997-945664, filed on 31 Oct 1997, PATENTED
RLI
       Continuation-in-part of Ser. No. WO 1996-EP1718, filed on 29 Apr 1996,
       UNKNOWN
       DE 1995-19516258
                            19950509
PRAI
       DE 1995-19545467
                                                                        <--
                            19951206
DT
       Utility
FS
       APPLICATION
       Howard C. Lee, Norris McLaughlin & Marcus, 30th Floor, 220 East 42nd
LREP
       Street, New York, NY, 10017
       Number of Claims: 21
CLMN
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 4370
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to new compounds of the formula
AB
             ##STR1##
       (I)
```

in which

X represents halogen,

Y represents halogen or alkyl and

Z represents halogen or alkyl,

with the proviso that always one of the radicals Y and Z represents halogen while the other represents alkyl, and

Het represents one of the groups ##STR2## ##STR3##

in which

A, B, D and G have the meanings given in the description, to a plurality of processes for their preparation and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ΙT 185151-67-1P

> (preparation of alkyldihalophenyl-substituted keto enols as pesticides and herbicides)

IT 185151-68-2P 185151-69-3P 185151-70-6P

185151-71-7P 185151-72-8P 185151-73-9P

185151-74-0P 185151-75-1P 185151-76-2P

185151-77-3P 185151-78-4P 185151-79-5P

185151-80-8P 185151-81-9P 185151-82-0P

185151-83-1P 185151-84-2P 185151-85-3P

185151-86-4P 185151-87-5P 185151-88-6P

185151-89-7P 185151-91-1P 185151-93-3P

185151-94-4P 185151-96-6P 185151-98-8P

185152-00-5P 185152-01-6P 185152-02-7P

185152-03-8P 185152-04-9P 185152-05-0P 185152-07-2P 185152-08-3P 185152-09-4P

185152-11-8P 185152-12-9P 185152-13-0P

185152-14-1P 185152-15-2P 185152-16-3P 185152-17-4P 185152-18-5P 185152-19-6P

185152-20-9P 185152-21-0P 185152-22-1P

185152-23-2P 185152-24-3P 185152-25-4P

185152-26-5P 185152-27-6P 185152-28-7P

185152-30-1P

(preparation of alkyldihalophenyl-substituted keto enols as pesticides and herbicides)

IT 185151-67-1P

(preparation of alkyldihalophenyl-substituted keto enols as pesticides and herbicides)

185151-67-1 USPATFULL RN

1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2,4-dichloro-6-methylphenyl)-4-hydroxy-CN (9CI) (CA INDEX NAME)

L90 ANSWER 3 OF 43 USPATFULL on STN 2003:244806 USPATFULL AN

```
2,4,5-trisubstituted phenylketo-enols for use as pesticides and
TI
       herbicides
       Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
IN
       Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
       Widdig, Arno, Odenthal, GERMANY, FEDERAL REPUBLIC OF
       Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
       Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF
       Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
       Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF
       Santel, Hans-Joachim, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
       Dollinger, Markus, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF
       Mencke, Norbert, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
       Turberg, Andreas, Erkrath, GERMANY, FEDERAL REPUBLIC OF
       Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF
                                  20030911
PΙ
       US 2003171219
                            Α1
                                  20020919 (10)
ΑI
       US 2002-247013
                            Α1
       Division of Ser. No. US 2000-496616, filed on 2 Feb 2000, PENDING Division of Ser. No. US 1997-983028, filed on 22 Dec 1997, GRANTED, Pat.
RLI
       No. US 6110872 A 371 of International Ser. No. WO 1996-EP2608, filed on
       17 Jun 1996, UNKNOWN
PRAI
       DE 1995-19523471
                             19950628
                                                                          <--
       DE 1996-19602524
                             19960125
DT
       Utility
       APPLICATION
FS
       KURT BRISCOE, NORRIS, MCLAUGHLIN & MARCUS, P.A., 220 EAST 42ND STREET,
LREP
       30TH FLOOR, NEW YORK, NY, 10017
       Number of Claims: 18
CLMN
       Exemplary Claim: 1
ECL
       No Drawings
DRWN
LN.CNT 4047
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The invention relates to new phenyl-substituted cyclic ketoenols of the
                       ##STR1##
       formula (I)
       in which
       Het represents one of the groups
                                             ##STR2##
       wherein A, B, D, G, X, Y and Z have the meaning given in the
       description, several processes and intermediate products for their
       preparation and their use as pest control agents and herbicides.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     186647-66-5P 186647-67-6P 186647-68-7P
      186647-69-8P 186647-70-1P 186647-71-2P
      186647-72-3P 186647-73-4P 186647-74-5P
      186647-75-6P 186647-76-7P 186647-77-8P
      186647-78-9P 186647-79-0P 186647-80-3P
      186647-81-4P 186647-82-5P 186647-83-6P
      186647-85-8P 186647-86-9P 186647-88-1P
      186647-90-5P 186647-92-7P 186647-94-9P
      186647-96-1P 186647-97-2P 186647-98-3P
         (preparation of 3-phenylheterocycloalkyl-2,4-dione enols as herbicides and
        pesticides)
ΙT
    186647-66-5P
         (preparation of 3-phenylheterocycloalkyl-2, 4-dione enols as herbicides and
         pesticides)
     186647-66-5 USPATFULL
RN
     1-0xaspiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,5-trimethylphenyl)-(9CI)
CN
```

(CA INDEX NAME)

L90 ANSWER 4 OF 43 USPATFULL on STN

AN 2003:208143 USPATFULL

TI Dialkyl-halogenophenyl-substituted ketoenols

Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF Widdig, Arno, Odenthal, GERMANY, FEDERAL REPUBLIC OF Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Santel, Hans-Joachim, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF

PI US 2003144504 A1 20030731

AI US 2002-197720 A1 20020718 (10)

RLI Division of Ser. No. US 2001-839481, filed on 20 Apr 2001, PENDING Division of Ser. No. US 1999-360510, filed on 26 Jul 1999, GRANTED, Pat. No. US 6251830 Division of Ser. No. US 1997-981610, filed on 23 Dec 1997, GRANTED, Pat. No. US 5994274 A 371 of International Ser. No. WO 1996-EP2601, filed on 17 Jun 1996, UNKNOWN

PRAI DE 1995-19523850 19950630 <-DE 1996-19603332 19960131 <--

DT Utility

FS APPLICATION

LREP KURT BRISCOE, NORRIS, MCLAUGHLIN & MARCUS, P.A., 220 EAST 42ND STREET, 30TH FLOOR, NEW YORK, NY, 10017

CLMN Number of Claims: 22 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 4496

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to new compounds of the formula (I) ##STR1##

with the proviso that one of the radicals Y and Z always represents halogen and the other alkyl,

Het represents one of the groups ##STR2##

in which

A, B, D and G have the meanings given in the description,

a plurality of processes for their preparation and their use as pesticides and herbicides.

 186747-59-1P 186747-60-4P 186747-61-5P 186747-62-6P 186747-63-7P 186747-64-8P 186747-65-9P 186747-66-0P 186747-68-2P 186747-74-0P 186747-70-6P 186747-72-8P 186747-74-0P 186747-76-2P 186747-78-4P 186747-85-3P 186747-87-5P 186747-84-2P 186747-89-7P 186747-90-0P 186747-91-1P 186747-92-2P 186747-93-3P 186747-94-4P 186747-95-5P 186747-96-6P 186747-97-7P 186747-98-8P 186748-02-7P 186748-03-8P 186748-04-9P 186748-05-0P 186748-06-1P 186748-07-2P

(preparation of 3-phenylheterocycloalkyl-2,4-dione enols as pesticides and herbicides)

IT 186747-50-2P

(preparation of 3-phenylheterocycloalkyl-2, 4-dione enols as pesticides and herbicides)

RN 186747-50-2 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2-bromo-4,6-dimethylphenyl)-4-hydroxy-(9CI) (CA INDEX NAME)

```
L90 ANSWER 5 OF 43 USPATFULL on STN
       2003:197206 USPATFULL
AN
       2-and 2,5-substituted phenylketoenols
TΤ
       Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
       Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
       Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF
       Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF
       Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF
       Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
       Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
       Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF
       Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF
       Turberg, Andreas, Erkrath, GERMANY, FEDERAL REPUBLIC OF
       Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
PΑ
       (non-U.S. corporation)
                               20030722
       US 6596873
                          B1
PΤ
                               20021004 (10)
       US 2002-264424
ΑT
       Division of Ser. No. US 2001-6115, filed on 10 Dec 2001, now patented,
RLI
       Pat. No. US 6504036 Division of Ser. No. US 2001-809619, filed on 15 Mar
       2001, now patented, Pat. No. US 6359151 Division of Ser. No. US
       2000-548129, filed on 12 Apr 2000, now patented, Pat. No. US 6255342
       Division of Ser. No. US 1999-230653, filed on 28 Jan 1999, now patented,
       Pat. No. US 6114374
       DE 1996-19631586
                                                                     <--
PRAI
                           19960805
       DE 1997-19716591
                                                                     <--
                           19970421
DT
       Utility
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FS
       GRANTED
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EXNAM Primary Examiner: Lambkin, Deborah C.

Henderson, Richard E.L. LREP

Number of Claims: 4 CLMN

Exemplary Claim: 1 ECL

0 Drawing Figure(s); 0 Drawing Page(s) DRWN

LN.CNT 2945

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to novel phenyl-substituted cyclic ketoenols of the formula (I) ##STR1##

. in which

Het represents one of the groups ##STR2##

in which A, B, D, G, X and Z are each as defined in the description,

to a plurality of processes and intermediates for their preparation, and to their use as pesticides.

## CAS INDEXING IS AVAILABLE FOR THIS PATENT.

203313-73-9P 203313-74-0P 203313-75-1P

203313-76-2P 203313-77-3P 203313-78-4P

203313-79-5P 203313-80-8P 203313-81-9P

203313-82-0P 203313-83-1P 203313-84-2P

203313-85-3P 203313-86-4P 203313-87-5P

203313-88-6P 203313-89-7P

(preparation of phenyl-substituted heterocyclic ketoenols as pesticides)

203313-73-9P

(preparation of phenyl-substituted heterocyclic ketoenols as pesticides)

203313-73-9 USPATFULL RN

1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2-chlorophenyl)-4-hydroxy- (9CI) CNINDEX NAME)

L90 ANSWER 6 OF 43 USPATFULL on STN

2003:184093 USPATFULL AN

Utilizing spirocyclic phenyl keto-enols as pesticides and herbicides TI

Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Overland Park, KS, United States Turberg, Andreas, Haan, GERMANY, FEDERAL REPUBLIC OF

Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF

(non-U.S. corporation) 20030708 US 6589976 PΙ В1

WO 9916748 19990408

20000321 (9) US 2000-509288

ΑI 19980912 WO 1998-EP5809

DE 1997-19742492 19970926 **/--**PRAI

Utility DT

GRANTED

EXNAM Primary Examiner: Raymond, Richard L.; Assistant Examiner:

Balasubramanian, Venkataraman

LREP Henderson, Richard E. L., Harmuth, Raymond J., Gil, Joseph C.

CLMN Number of Claims: 14

ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 2859

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to novel spirocyclic phenylketoenols of the formula ##STR1##

in which

Het represents one of the groups ##STR2##

in which

Q represents ##STR3##

and X, Y, Z, m, n, R. $\sup$ .6, R. $\sup$ .9, R. $\sup$ .10 and R. $\sup$ .11 are each as defined in the description,

to a plurality of processes and intermediates for their preparation and to their use as pesticides and herbicides.

### CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 221526-93-8P 221526-96-1P 221526-97-2P

221526-98-3P 221526-99-4P 221527-00-0P

(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

IT 221527-03-3P 221527-04-4P 221527-05-5P

221527-06-6P 221527-08-8P 221527-09-9P

221527-10-2P 221527-11-3P 221527-12-4P

221527-13-5P 221527-18-0P 221527-19-1P

221527-20-4P 221527-21-5P 221527-22-6P

221527-23-7P

(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

IT 221526-95-0P 221527-01-1P

(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

IT 221526-94-9P 221527-07-7P 221527-14-6P

221527-15-7P 221527-16-8P 221527-24-8P

221527-25-9P

(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

IT 221526-92-7P 221527-02-2P

(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

IT 221526-93-8P

(preparation of spirocyclic Ph keto enols with insecticidal and acaricidal activity)

RN 221526-93-8 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-ene-2,8-dione, 4-hydroxy-3-(2,4,6-trimethylphenyl)-,8-(0-methyloxime) (9CI) (CA INDEX NAME)

L90 ANSWER 7 OF 43 USPATFULL on STN

AN 2003:140964 USPATFULL

TI Arylphenyl-substituted cyclic ketoenols

Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF
Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF
Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF
Drewes, Mark Wilhelm, Langenfeld, GERMANY, FEDERAL REPUBLIC OF
Dollinger, Markus, Overland Park, KS, UNITED STATES
Wetcholowsky, Ingo, Estancia Marambaia, BRAZIL
Feucht, Dieter, Monheim, GERMANY, FEDERAL REPUBLIC OF
Pontzen, Rolf, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
Myers, Randy Allen, Overland Park, KS, UNITED STATES

PI US 2003096806 A1 20030522

AI US 2002-192361 A1 20020710 (10)

RLI Division of Ser. No. US 2001-673907, filed on 2 Jan 2001, GRANTED, Pat. No. US 6451843 A 371 of International Ser. No. WO 1999-EP2488, filed on 14 Apr 1999, UNKNOWN

PRAI DE 1998-19818732 19980427

DT Utility

FS APPLICATION

LREP BAYER CORPORATION, PATENT DEPARTMENT, 100 BAYER ROAD, PITTSBURGH, PA, 15205

CLMN Number of Claims: 27

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 4359

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel arylphenyl-substituted cyclic ketoenols of the **formula** (I) ##STR1##

in which

X represents halogen, alkyl, alkoxy, alkenyloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro, cyano or in each case optionally substituted phenyl, phenoxy, phenylthio, phenylalkoxy or phenylalkylthio,

Y represents in each case optionally substituted cycloalkyl, aryl or hetaryl,

W represents hydrogen, halogen, alkyl, alkoxy, alkenyloxy, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro or cyano,

Z represents halogen, alkyl, alkoxy, alkenyloxy, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro or cyano,

CKE represents one of the groups ##STR2##

in which

A, B, D, G and Q.sup.1, S, Q.sup.6 are each as defined in the description,

to a plurality of processes for their preparation and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 247902-12-1P 247902-13-2P

(preparation of biphenylpyrrolinones as insecticides and acaricides)

IT 186647-72-3 186647-74-5

(preparation of biphenylpyrrolinones as insecticides and acaricides)

IT 247902-10-9P 247902-11-0P

(preparation of biphenylpyrrolinones as insecticides and acaricides)

IT 247902-12-1P

(preparation of biphenylpyrrolinones as insecticides and acaricides)

RN 247902-12-1 USPATFULL

CN Propanoic acid, 2-methyl-, 3-(4',5-dichloro-2-methyl[1,1'-biphenyl]-4-yl)-8-methoxy-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (9CI) (CA INDEX NAME)

L90 ANSWER 8 OF 43 USPATFULL on STN

AN 2003:106938 USPATFULL

TI Arylphenyl-substituted cyclic ketoenols

IN Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Bretshneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF Drewes, Mark Wilhelm, Langenfeld, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Overland Park, KS, UNITED STATES Wetcholowsky, Ingo, Vinhedo, BRAZIL

Myers, Randy Allen, Overland Park, KS, UNITED STATES

PI US 2003073851 A1 20030417

AI US 2002-142325 A1 20020509 (10)

RLI Division of Ser. No. US 2001-646722, filed on 2 Jan 2001, PENDING A 371 of International Ser. No. WO 1999-EP1787, filed on 18 Mar 1999, UNKNOWN

PRAI DE 1998-19813354 19980326

DT Utility

FS APPLICATION

LREP BAYER CORPORATION, PATENT DEPARTMENT, 100 BAYER ROAD, PITTSBURGH, PA, 15205

CLMN Number of Claims: 27 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 4418

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel arylphenyl-substituted cyclic ketoenols of the **formula** (I) ##STR1##

in which

X represents halogen, alkyl, alkoxy, alkenyloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro, cyano or in each case optionally substituted phenyl, phenoxy, phenylthio, phenylalkoxy or phenylalkylthio,

Y represents in each case optionally substituted cycloalkyl, aryl or hetaryl,

W and Y independently of one another each represent hydrogen, halogen, alkyl, alkoxy, alkenyloxy, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro or cyano,

CKE represents one of the groups ##STR2##

in which

A, B, D, G and Q.sup.1 to Q.sup.6 are each as defined in the description, to a plurality of processes for their preparation and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 244159-16-8P 244159-17-9P 244159-18-0P

244159-19-1P 244159-20-4P

(preparation of arylketoenols as pesticides and herbicides)

IT 244159-54-4

(preparation of arylketoenols as pesticides and herbicides)

IT 244159-16-8P

(preparation of arylketoenols as pesticides and herbicides)

RN 244159-16-8 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(4'-chloro-2,4,6-trimethyl[1,1'-biphenyl]-3-yl)-4-hydroxy-8-methoxy- (9CI) (CA INDEX NAME)

L90 ANSWER 9 OF 43 USPATFULL on STN

AN 2003:65308 USPATFULL

TI Phenyl-substituted cyclic ketoenols

IN Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF

Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Lui, Norbert, Koln, GERMANY, FEDERAL REPUBLIC OF Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF Widdig, Arno, Odenthal, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF Santel, Hans-Joachim, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF Mencke, Norbert, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Turberg, Andreas, Erkrath, GERMANY, FEDERAL REPUBLIC OF 20030306

PΙ US 2003045432 A1

20011211 (10) US 2001-14713 A1 AΙ

Division of Ser. No. US 1997-875872, filed on 5 Aug 1997, GRANTED, Pat. RLI Mo. US 6358887 A 371 of International Ser. No. WO 1996-EP382, filed on 31\_Jan 1996, UNKNOWN

DE 1995-19504621 19950213 PRAI DE 1995-19543864 19951124-

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DT Utility

FS APPLICATION

KURT BRISCOE, NORRIS, MCLAUGHLIN & MARCUS, P.A., 220 EAST 42ND STREET, LREP 30TH FLOOR, NEW YORK, NY, 10017

CLMN Number of Claims: 26

Exemplary Claim: 1 ECL

DRWN No Drawings

LN.CNT 3980

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The present invention relates to new compounds of the formula AB ##STR1## (I)

in which

X, Y and Z have the meanings given in the description and

Het represents one of the groups ##STR2##

in which

A, B, D and G have the meanings given in the description,

a plurality of processes for their preparation, and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

148476-66-8P 181299-98-9P 181299-99-0P

181300-00-5P

(preparation of 3-phenyl-2,4-dioxopyrrolidine tautomers and analogs as herbicides and pesticides)

148476-66-8P IT

> (preparation of 3-phenyl-2,4-dioxopyrrolidine tautomers and analogs as herbicides and pesticides)

148476-66-8 USPATFULL RN

Propanoic acid, 2,2-dimethyl-, 2-oxo-3-(2,4,6-trimethylphenyl)-1-CN oxaspiro[4.5]dec-3-en-4-yl ester (9CI) (CA INDEX NAME)

ANSWER 10 OF 43 USPATFULL on STN L90 2003:26326 USPATFULL AN 2,4,5-trisubstituted phenylketo-enols for use as pesticides and TΤ herbicides Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF ΙN Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Widdig, Arno, Odenthal, GERMANY, FEDERAL REPUBLIC OF Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF Santel, Hans-Joachim, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF Mencke, Norbert, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Turberg, Andreas, Erkrath, GERMANY, FEDERAL REPUBLIC OF Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF PA(non-U.S. corporation) 20030128 PΙ US 6511942 В1 US 2000-496616 20000202 (9) AΤ Division of Ser. No. US 983028, now patented, Pat. No. US 6110872 RLT DE 1995-19523471 PRAI 19950628 <---DE 1996-19602524 19960125 DT Utility GRANTED FS Primary Examiner: Kifle, Bruck EXNAM Norris McLaughlin & Marcus LREP CLMN Number of Claims: 7 Exemplary Claim: 1 ECL 0 Drawing Figure(s); 0 Drawing Page(s) DRWN LN.CNT 3551 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The invention relates to new phenyl-substituted cyclic ketoenols of the formula (I) ##STR1##

in which

Het represents one of the groups ##STR2##

wherein A, B, D, G, X, Y and Z have the meaning given in the description, several processes and intermediate products for their preparation and their use as pest control agents and herbicides.

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CAS INDEXING IS AVAILABLE FOR THIS PATENT.

186647-66-5P 186647-67-6P 186647-68-7P
186647-69-8P 186647-70-1P 186647-71-2P
186647-72-3P 186647-73-4P 186647-74-5P
186647-75-6P 186647-76-7P 186647-77-8P
186647-78-9P 186647-79-0P 186647-80-3P
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186647-81-4P 186647-82-5P 186647-83-6P 186647-85-8P 186647-86-9P 186647-88-1P 186647-90-5P 186647-92-7P 186647-94-9P 186647-96-1P 186647-97-2P 186647-98-3P

(preparation of 3-phenylheterocycloalkyl-2,4-dione enols as herbicides and pesticides)

IT 186647-66-5P

(preparation of 3-phenylheterocycloalkyl-2,4-dione enols as herbicides and pesticides)

RN 186647-66-5 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,5-trimethylphenyl)- (9CI) (CA INDEX NAME)

L90 ANSWER 11 OF 43 USPATFULL on STN

AN 2003:6986 USPATFULL

TI 2- and 2.5-substituted phenylketoenols

Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF
Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF
Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF
Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
Wachendorff-Neuman, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF
Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF
Turberg, Andreas, Erkrath, GERMANY, FEDERAL REPUBLIC OF

PA Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF

(non-U.S. corporation)

PI US 6504036 B1 20030107

AI US 2001-6115 20011210 (10)

RLI Division of Ser. No. US 2001-809619, filed on 15 Mar 2001, now patented, Pat. No. US 6359151 Division of Ser. No. US 2000-548129, filed on 12 Apr 2000, now patented, Pat. No. US 6255342 Division of Ser. No. US 1999-230653, filed on 28 Jan 1999, now patented, Pat. No. US 6114374

PRAI DE 1996-19631586 19960805 <-DE 1997-19716591 19970421 <--

DT Utility FS GRANTED

EXNAM Primary Examiner: Lambkin, Deborah C. LREP Gil, Joseph C., Henderson, Richard E. L.

CLMN Number of Claims: 4 ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 2999

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to novel phenyl-substituted cyclic ketoenols of the formula (I) ##STR1##

in which

Het represents one of the groups ##STR2##

in which A, B, D, G, X and Z are each as defined in the description,

to a plurality of processes and intermediates for their preparation, and to their use as pesticides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 203313-73-9P 203313-74-0P 203313-75-1P 203313-76-2P 203313-77-3P 203313-84P 203313-79-5P 203313-80-8P 203313-81-9P

203313-82-0P 203313-83-1P 203313-84-2P

203313-85-3P 203313-86-4P 203313-87-5P

203313-88-6P 203313-89-7P

(preparation of phenyl-substituted heterocyclic ketoenols as pesticides)

IT 203313-73-9P

(preparation of phenyl-substituted heterocyclic ketoenols as pesticides)

RN 203313-73-9 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2-chlorophenyl)-4-hydroxy- (9CI) (CA INDEX NAME)

L90 ANSWER 12 OF 43 USPATFULL on STN

AN 2002:330449 USPATFULL

TI Arylphenyl-substituted cyclic ketoenols

IN Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF Drewes, Mark-Wilhelm, Langenfeld, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Overland Park, KS, UNITED STATES

Wetcholowsky, Ingo, Cond. Estancia Marambaia, BRAZIL Myers, Randy Allen, Overland Park, KS, UNITED STATES

PI US 2002188136 A1 20021212

AI US 2002-137763 A1 20020502 (10)

RLI Division of Ser. No. US 2000-623016, filed on 23 Oct 2000, GRANTED, Pat. No. US 6417370 A 371 of International Ser. No. WO 1999-EP1029, filed on 17 Feb 1999, UNKNOWN

PRAI DE 1998-19808261 19980227

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DT Utility

FS APPLICATION

LREP BAYER CORPORATION, PATENT DEPARTMENT, 100 BAYER ROAD, PITTSBURGH, PA, 15205

CLMN Number of Claims: 27 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 4860

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel arylphenyl-substituted cyclic ketoenols of the **formula** (I) ##STR1##

in which

X represents halogen, alkyl, alkoxy, alkenyloxy, alkylthio,

alkylsulphinyl, alkylsulphonyl, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro, cyano or in each case optionally substituted phenyl, phenoxy, phenylthio, phenylalkoxy or phenylalkylthio,

Y represents in each case optionally substituted cycloalkyl, aryl or hetaryl,  $\ensuremath{\mathsf{e}}$ 

Z represents hydrogen, halogen, alkyl, alkoxy, alkenyloxy, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro or cyano,

CKE represents one of the groups ##STR2##

in which

A, B. D, G and Q.sup.1 to Q.sup.6 are each as defined in the description,

to a plurality of processes for their preparation and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 241144-53-6P 241144-54-7P 241144-55-8P

241144-56-9P 241144-57-0P 241144-58-1P

241144-60-5P 241144-61-6P 241144-62-7P

241144-63-8P 241144-64-9P 241144-65-0P

241144-66-1P 241144-67-2P 241144-68-3P

(preparation of cyclic ketoenols as herbicides and pesticides)

IT 241145-39-1

(preparation of cyclic ketoenols as herbicides and pesticides)

IT 241144-53-6P

(preparation of cyclic ketoenols as herbicides and pesticides)

RN 241144-53-6 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(4'-chloro-3,5-dimethyl[1,1'-biphenyl]-4-yl)-4-hydroxy-8-methoxy- (9CI) (CA INDEX NAME)

#### STRUCTURE DIAGRAM IS NOT AVAILABLE

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L90 ANSWER 13 OF 43 USPATFULL on STN
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AN 2002:311054 USPATFULL

TI Substituted phenyl keto enols as pesticides and herbicides

Lieb, Volker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
Widdig, Arno, Odenthal, GERMANY, FEDERAL REPUBLIC OF
Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF
Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF
Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF
Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF
Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF

PA Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

PI US 6486343 B1 20021126

AI US 2002-74351 20020212 (10)

RLI Division of Ser. No. US 2001-871611, filed on 1 Jun 2001, now patented, Pat. No. US 6388123 Division of Ser. No. US 2000-550105, filed on 14 Apr 2000, now patented, Pat. No. US 6271180, issued on 7 Aug 2001 Division of Ser. No. US 155637, now patented, Pat. No. US 6140358, issued on 31 Oct 2000

PRAI DE 1996-19613171 19960402 <-DE 1996-19649665 19961129 <--

DT Utility

FS GRANTED

EXNAM Primary Examiner: Lambkin, Deborah C.

LREP Gil, Joseph C., Harmuth, Raymond J.

CLMN Number of Claims: 4 ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 3270

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel compounds of the **formula** (I) ##STR1##

in which

Het represents one of the groups ##STR2##

in which

A, B, D, G, V, W, X,  $\dot{Y}$  and Z are as defined in the description, processes and intermediates for their preparation, and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 197710-62-6P 197710-64-8P

(preparation of arylheterocyclic keto enols as insecticides and acaricides)

IT 197710-65-9P 197710-66-0P 197710-67-1P

197710-68-2P 197710-69-3P 197710-70-6P

197710-71-7P 197710-72-8P 197710-73-9P

197710-74-0P 197710-75-1P 197710-76-2P

197710-77-3P

(preparation of arylheterocyclic keto enols as insecticides and acaricides)

IT 197710-62-6P

(preparation of arylheterocyclic keto enols as insecticides and acaricides)

RN 197710-62-6 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(3-chloro-2,6-dimethylphenyl)-4-hydroxy-(9CI) (CA INDEX NAME)

L90 ANSWER 14 OF 43 USPATFULL on STN

AN 2002:288164 USPATFULL

TI Methods of making substituted phenylketoenols

IN Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Overland Park, KS, UNITED STATES Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF

PI US 2002161034 A1 20021031 US 6630594 B2 20031007

AI US 2002-59094 A1 20020128 (10)

Division of Ser. No. US 2001-895619, filed on 29 Jun 2001, PENDING RLI Division of Ser. No. US 1999-319489, filed on 4 Jun 1999, GRANTED, Pat.

No. US 6288102

PRAI DE 1996-19651686 19961212 <--

DT Utility

FS APPLICATION

BAYER CORPORATION, PATENT DEPARTMENT, 100 BAYER ROAD, PITTSBURGH, PA, LREP 15205

CLMN Number of Claims: 19

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2678

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to novel phenyl-substituted cyclic ketoenols of the formula (I) ##STR1##

in which

Het represents one of the groups

and G, V, W, X, Y and Z are each as defined in the description, to processes and intermediates for their preparation and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

209111-40-0P 209111-41-1P 209111-42-2P

209111-43-3P 209111-44-4P 209111-45-5P

209111-46-6P 209111-47-7P 209111-48-8P

209111-49-9P 209111-50-2P 209111-51-3P 209111-52-4P 209111-53-5P 209111-54-6P

209111-55-7P 209111-56-8P 209111-57-9P

209111-58-0P 209111-59-1P 209111-60-4P

209111-61-5P 209111-62-6P

(preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivs. and analogs as herbicides and pesticides)

IT 209111-40-0P

(preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivs. and analogs as herbicides and pesticides)

209111-40-0 USPATFULL RN

1,7-Dioxaspiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,6-trimethylphenyl)-CN (9CI) (CA INDEX NAME)

ANSWER 15 OF 43 USPATFULL on STN L90

AN 2002:254480 USPATFULL

ΤI Aryl phenyl substituted cyclic ketoenols

Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF IN Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF

Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Bretshneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF Drewes, Mark Wilhelm, Langenfeld, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Overland Park, KS, United States Wetcholowsky, Ingo, Vinhedo, BRAZIL

Myers, Randy Allen, Overland Park, KS, United States

PA Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

PI US 6458965 B1 20021001

WO 9948869 19990930

<--

AI US 2001-646722 20010102 (9) WO 1999-EP1787 19990318

20010102 PCT 371 date

PRAI DE 1998-19813354 19980326 <--

DT Utility FS GRANTED

EXNAM Primary Examiner: Shah, Mukund; Assistant Examiner: Patel, Sudhaker B.

LREP Gil, Joseph C., Harmuth, Raymond J.

CLMN Number of Claims: 12 ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 3888

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel arylphenyl-substituted cyclic ketonols of the **formula** (I) ##STR1##

in which

X represents halogen, alkyl, alkoxy, alkenyloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro, cyano or in each case optionally substituted phenyl, phenoxy, phenylthio, phenylalkoxy or phenylalkylthio,

Y represents in each case optionally substituted cycloalkyl, aryl or hetaryl,

W and Y independently of one another each represent hydrogen, halogen, alkyl, alkoxy, alkenyloxy, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro or cyano,

CKE represents one of the groups ##STR2##

in which

A, B, D, G and Q.sup.1 to Q.sup.6 are each as defined in the description,

to a plurality of processes for their preparation and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 244159-16-8P 244159-17-9P 244159-18-0P

244159-19-1P 244159-20-4P

(preparation of arylketoenols as pesticides and herbicides)

IT 244159-54-4

(preparation of arylketoenols as pesticides and herbicides)

IT 244159-16-8P

(preparation of arylketoenols as pesticides and herbicides)

RN 244159-16-8 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(4'-chloro-2,4,6-trimethyl[1,1'-biphenyl]-3-yl)-4-hydroxy-8-methoxy- (9CI) (CA INDEX NAME)

```
L90 ANSWER 16 OF 43 USPATFULL on STN
AN
       2002:239049 USPATFULL
      Arylphenyl-substituted cyclic keto enols
TI
      Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
ΙN
       Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
      Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF
       Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
      Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF
       Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
      Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF
       Drewes, Mark Wilhelm, Langenfeld, GERMANY, FEDERAL REPUBLIC OF
      Dollinger, Markus, Overland Park, KS, United States
      Wetcholowsky, Ingo, Estancia Marambaia, BRAZIL
       Feucht, Dieter, Monheim, GERMANY, FEDERAL REPUBLIC OF
       Pontzen, Rolf, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
      Myers, Randy Allen, Overland Park, KS, United States
      Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
PA
       (non-U.S. corporation)
       US 6451843
                               20020917
PI
      WO 9955673
                  19991104
       US 2001-673907
                               20010102 (9)
ΑI
      WO 1999-EP2488
                               19990414
                               20010102 PCT 371 date
                           19980427
                                                                     <--
PRAI
      DE 1998-19818732
DT
      Utility
FS
      GRANTED
      Primary Examiner: Shah, Mukund J.; Assistant Examiner: Truong, Tamthom
EXNAM
LREP
      Gil, Joseph C., Harmuth, Raymond J.
CLMN
      Number of Claims: 8
      Exemplary Claim: 1
ECL
       0 Drawing Figure(s); 0 Drawing Page(s)
DRWN
LN.CNT 3930
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      The present invention relates to novel arylphenyl-substituted cyclic
AΒ
       ketoenols, their preparation and the use of such ketoenols as pesticides
       and/or herbicides. The novel arylphenyl-substituted cyclic ketoenols are
       of the formula (I) ##STR1##
```

in which

CKE refers to the cyclic ketoenol and W, X, Y and Z are as defined in the specification.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 247902-12-1P 247902-13-2P

(preparation of biphenylpyrrolinones as insecticides and acaricides)

IT 186647-72-3 186647-74-5

(preparation of biphenylpyrrolinones as insecticides and acaricides)

IT 247902-10-9P 247902-11-0P

(preparation of biphenylpyrrolinones as insecticides and acaricides)

IT 247902-12-1P

(preparation of biphenylpyrrolinones as insecticides and acaricides)

RN 247902-12-1 USPATFULL

CN Propanoic acid, 2-methyl-, 3-(4',5-dichloro-2-methyl[1,1'-biphenyl]-4-yl)-8-methoxy-2-oxo-1-oxaspiro[4.5]dec-3-en-4-yl ester (9CI) (CA INDEX NAME)

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L90 ANSWER 17 OF 43 USPATFULL on STN
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AN 2002:168373 USPATFULL

TI Arylphenyl-substituted cyclic keto-enols

IN Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF
Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF
Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF
Drewes, Mark-Wilhelm, Langenfeld, GERMANY, FEDERAL REPUBLIC OF
Dollinger, Markus, Overland Park, KS, United States

Wetcholowsky, Ingo, Cond. Estancia Marambaia, BRAZIL Myers, Randy Allen, Overland Park, KS, United States

PA Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF (non-U.S. corporation)

PI US 6417370 B1 20020709

WO 9943649 19990902 US 2000-623016 20001023 (9)

WO 1999-EP1029 19990217

10 1999-EF1029 19990217

20001023 PCT 371 date

PRAI DE 1998-19808261 19980227 . <-

DT Utility

ΑI

FS GRANTED

EXNAM Primary Examiner: Shah, Mukund J.; Assistant Examiner: Patel, Sudhaker

LREP Gil, Joseph C., Harmuth, Raymond J.

CLMN Number of Claims: 8

ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 4409

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel arylphenyl-substituted cyclic ketoenols of the **formula** (I) ##STR1##

in which

X represents halogen, alkyl, alkoxy, alkenyloxy, alkylthio, alkylsulphinyl, alkylsulphonyl, halogenoalkyl, halogeno-alkoxy, halogenoalkenyloxy, nitro, cyano or in each case optionally substituted phenyl, phenoxy, phenylthio, phenyl-alkoxy or phenylalkylthio,

Y represents in each case optionally substituted cycloalkyl, aryl or hetaryl,

Z represents hydrogen, halogen, alkyl, alkoxy, alkenyloxy, halogenoalkyl, halogenoalkoxy, halogenoalkenyloxy, nitro or cyano,

CKE represents one of the groups ##STR2##

in which

A, B, D, G and Q.sup.1 to Q.sup.6 are each as defined in the description, to a plurality of processes for their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 241144-53-6P 241144-54-7P 241144-55-8P

241144-56-9P 241144-57-0P 241144-58-1P

241144-60-5P 241144-61-6P 241144-62-7P

241144-63-8P 241144-64-9P 241144-65-0P

241144-66-1P 241144-67-2P 241144-68-3P

(preparation of cyclic ketoenols as herbicides and pesticides)

IT 241145-39-1

(preparation of cyclic ketoenols as herbicides and pesticides)

IT 241144-53-6P

(preparation of cyclic ketoenols as herbicides and pesticides)

RN 241144-53-6 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(4'-chloro-3,5-dimethyl[1,1'-biphenyl]-4-yl)-4-hydroxy-8-methoxy- (9CI) (CA INDEX NAME)

## STRUCTURE DIAGRAM IS NOT AVAILABLE

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L90 ANSWER 18 OF 43 USPATFULL on STN
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AN 2002:116298 USPATFULL

TI Substituted phenylketoenols

IN Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Overland Park, KS, United States Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF

PA Bayer Aktiengesellschaft, Leverkusan, GERMANY, FEDERAL REPUBLIC OF

(non-U.S. corporation)

PI US 6391912 B1 20020521

US 2002072617 A1 20020613 US 2001-895649 20010629 (9)

RLI Division of Ser. No. US 1999-319489, filed on 4 Jun 1999, now patented, Pat. No. US 6288102

PRAI DE 1996-19651686 19961212 <--

DT Utility

AΤ

FS GRANTED

EXNAM Primary Examiner: Solola, T. A.

LREP Gil, Joseph C., Mrozinski, Jr., John E.

CLMN Number of Claims: 8 ECL Exemplary Claim: 1

0 Drawing Figure(s); 0 Drawing Page(s) DRWN

LN.CNT 2525

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

The invention relates to novel phenyl-substituted cyclic ketoenols of the formula (I) ##STR1##

in which

Het represents one of the groups ##STR2##

and G, V, W, X, Y and Z are each as defined in the description,

to processes and intermediates for their preparation and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

209111-40-0P 209111-41-1P 209111-42-2P

209111-43-3P 209111-44-4P 209111-45-5P

209111-46-6P 209111-47-7P 209111-48-8P

209111-49-9P 209111-50-2P 209111-51-3P

209111-52-4P 209111-53-5P 209111-54-6P

209111-55-7P 209111-56-8P 209111-57-9P

209111-58-0P 209111-59-1P 209111-60-4P

209111-61-5P 209111-62-6P

(preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivs. and analogs as herbicides and pesticides)

209111-40-0P

(preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivs. and analogs as herbicides and pesticides)

209111-40-0 USPATFULL RN

1,7-Dioxaspiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,6-trimethylphenyl)-CN (9CI) (CA INDEX NAME)

L90 ANSWER 19 OF 43 USPATFULL on STN

2002:109215 USPATFULL

TΙ Substituted phenyl keto enols as pesticides and herbicides

Lieb, Volker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF IN Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Widdig, Arno, Odenthal, GERMANY, FEDERAL REPUBLIC OF Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF

Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF

Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF

Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF PΑ (non-U.S. corporation)

PI US 6388123 B1 20020514 AI US 2001-871611 20010601 (9)

RLI Division of Ser. No. US 2000-550105, filed on 14 Apr 2000, now patented, Pat. No. US 6271180 Division of Ser. No. US 1998-155637, filed on 29 Sep 1998, now patented, Pat. No. US 6140358

PRAI DE 1996-19613171 19960402 <-DE 1996-19649665 19961129 <--

DT Utility FS GRANTED

EXNAM Primary Examiner: Lambkin, Deborah C.

LREP Gil, Joseph C., Harmuth, Raymond J.

CLMN Number of Claims: 6 ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 3353

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel compounds of the **formula** (I) ##STR1##

in which

Het represents one of the groups ##STR2##

in which

A, B, D, G, V, W, X, Y and Z are as defined in the description,

processes and intermediates for their preparation, and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 197710-62-6P 197710-64-8P

(preparation of arylheterocyclic keto enols as insecticides and acaricides)

197710-65-9P 197710-66-0P 197710-67-1P 197710-68-2P 197710-69-3P 197710-70-6P 197710-71-7P 197710-72-8P 197710-73-9P 197710-74-0P 197710-75-1P 197710-76-2P

197710-77-3P

(preparation of arylheterocyclic keto enols as insecticides and acaricides)

IT 197710-62-6P

(preparation of arylheterocyclic keto enols as insecticides and acaricides)

RN 197710-62-6 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(3-chloro-2,6-dimethylphenyl)-4-hydroxy-(9CI) (CA INDEX NAME)

L90 ANSWER 20 OF 43 USPATFULL on STN

AN 2002:95832 USPATFULL

TI Alkyl-dihalogenated phenyl-substituted ketoenols useful as pesticides and herbicides

IN Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF

Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Widdig, Arno, Odenthal, GERMANY, FEDERAL REPUBLIC OF Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Santel, Hans-Joachim, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF Mencke, Norbert, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Turberg, Andreas, Erkrath, GERMANY, FEDERAL REPUBLIC OF Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF PA(non-U.S. corporation) 20020430 PΙ US 6380246 В1 19990923 (9) ΑI US 1999-404424 Division of Ser. No. US 1997-945664, filed on 31 Oct 1997, now abandoned RLI Continuation-in-part of Ser. No. WO 1996-EP1781, filed on 29 Apr 1996 DE 1995-19516258 19950509 PRAI DE 1995-19545467 19951206 <--Utility DТ FS GRANTED Primary Examiner: Kifle, Bruck; Assistant Examiner: Truong, Tamthom N. EXNAM LREP Norris McLaughlin & Marcus CLMN Number of Claims: 11 ECL Exemplary Claim: 1 0 Drawing Figure(s); 0 Drawing Page(s) DRWN LN.CNT 3817 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The present invention relates to new compounds of the formula (I) ##STR1## in which X represents halogen, Y represents halogen or alkyl and Z represents halogen or alkyl, with the proviso that always one of the radicals Y and Z represents halogen while the other represents alkyl, and Het represents one of the groups ##STR2## in which

A, B, D and G have the meanings given in the description,

to a plurality of processes for their preparation and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 185151-67-1P

(preparation of alkyldihalophenyl-substituted keto enols as pesticides and herbicides)

IT 185151-68-2P 185151-69-3P 185151-70-6P 185151-71-7P 185151-72-8P 185151-73-9P 185151-74-0P 185151-75-1P 185151-76-2P 185151-77-3P 185151-78-4P 185151-79-5P 185151-80-8P 185151-81-9P 185151-82-0P 185151-83-1P 185151-84-2P 185151-85-3P 185151-86-4P 185151-87-5P 185151-88-6P 185151-89-7P 185151-91-1P 185151-93-3P 185151-94-4P 185151-96-6P 185151-98-8P 185152-00-5P 185152-01-6P 185152-02-7P 185152-03-8P 185152-04-9P 185152-05-0P 185152-07-2P 185152-08-3P 185152-09-4P 185152-11-8P 185152-12-9P 185152-13-0P 185152-14-1P 185152-15-2P 185152-16-3P 185152-17-4P 185152-18-5P 185152-19-6P 185152-20-9P 185152-21-0P 185152-22-1P 185152-23-2P 185152-24-3P 185152-25-4P 185152-26-5P 185152-27-6P 185152-28-7P 185152-30-1P

(preparation of alkyldihalophenyl-substituted keto enols as pesticides and herbicides)

### IT 185151-67-1P

(preparation of alkyldihalophenyl-substituted keto enols as pesticides and herbicides)

RN 185151-67-1 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2,4-dichloro-6-methylphenyl)-4-hydroxy-(9CI) (CA INDEX NAME)

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L90 ANSWER 21 OF 43 USPATFULL on STN
AN
      2002:57727 USPATFULL
       2-Phenyl-substituted heterocyclic 1,3-ketonols as herbicides and
TI
      pesticides
      Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
IN
      Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF
      Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
      Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
      Lui, Norbert, Koln, GERMANY, FEDERAL REPUBLIC OF
      Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF
      Widdig, Arno, Odenthal, GERMANY, FEDERAL REPUBLIC OF
      Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
      Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF
      Santel, Hans-Joachim, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
      Dollinger, Markus, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
      Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF
      Mencke, Norbert, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
      Turberg, Andreas, Erkrath, GERMANY, FEDERAL REPUBLIC OF
      Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
PA
       (non-U.S. corporation)
      US 6358887
                               20020319
PΤ
      WO 9625395 19960822
                                                                    <--
      US 1997-875872
                               19970805 (8)
AΙ
      WO 1996-EP382
                               19960131
                               19970805 PCT 371 date
                                                                    <--
      DE 1995-19504621
                         19950213
PRAI
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DE 1995-19543864 19951124

DT Utility FS GRANTED

EXNAM Primary Examiner: Kifle, Bruck

LREP Norris McLaughlin & Marcus

CLMN Number of Claims: 11 ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 3445

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to new compounds of the formula

(I) ##STR1##

in which

X, Y and Z have the meanings given in the description and

Het represents one of the groups ##STR2##

in which

A, B, D and G have the meanings given in the description,

a plurality of processes for their preparation, and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

# IT 148476-66-8P 181299-98-9P 181299-99-0P

181300-00-5P

(preparation of 3-phenyl-2,4-dioxopyrrolidine tautomers and analogs as herbicides and pesticides)

IT 148476-66-8P

(preparation of 3-phenyl-2,4-dioxopyrrolidine tautomers and analogs as herbicides and pesticides)

RN 148476-66-8 USPATFULL

CN Propanoic acid, 2,2-dimethyl-, 2-oxo-3-(2,4,6-trimethylphenyl)-1-oxaspiro[4.5]dec-3-en-4-yl ester (9CI) (CA INDEX NAME)

L90 ANSWER 22 OF 43 USPATFULL on STN

AN 2002:37855 USPATFULL

TI Dialkyl-halogenophenyl-substituted ketoenols

Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF
Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF
Widdig, Arno, Odenthal, GERMANY, FEDERAL REPUBLIC OF
Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF
Dollinger, Markus, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
Santel, Hans-Joachim, Leverkusen, GERMANY, FEDERAL REPUBLIC OF

Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF

```
Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF
       Andersch, Wolfram, Gladbach, GERMANY, FEDERAL REPUBLIC OF
ΡI
       US 2002022575
                          A1
                               20020221
       US 6469196
                          B2
                               20021022
       US 2001-839481
                               20010420 (9)
AΙ
                          A1
       Division of Ser. No. US 1999-360510, filed on 26 Jul 1999, GRANTED, Pat.
RLI
       No. US 6251830 Division of Ser. No. US 1997-981610, filed on 23 Dec
       1997, GRANTED, Pat. No. US 5994274 A 371 of International Ser. No. WO
       1996-EP2601, filed on 17 Jun 1996, UNKNOWN
PRAI
       DE 1995-19523850
                           19950630
       DE 1996-19603332
                           19960131
                                                                     <--
       Utility
DT
FS
       APPLICATION
       Kurt G. Briscoe, Norris McLaughlin & Marcus, P.A., 220 East 42nd Street
LREP
       - 30th Floor, New York, NY, 10017
CLMN
       Number of Claims: 22
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 4510
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to new compounds of the formula
       (I)
             ##STR1##
       in which
       X represents alkyl,
       Y represents halogen or alkyl and
       Z represents halogen or alkyl,
       with the proviso that one of the radicals Y and Z always represents
       halogen and the other alkyl,
       Het represents one of the groups
                                          ##STR2##
       in which
      A, B, D and G have the meanings given in the description,
      a plurality of processes for their preparation and their use as
      pesticides and herbicides.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    186747-50-2P 186747-51-3P 186747-52-4P
      186747-53-5P 186747-54-6P 186747-55-7P
      186747-56-8P 186747-57-9P 186747-58-0P
      186747-59-1P 186747-60-4P 186747-61-5P
      186747-62-6P 186747-63-7P 186747-64-8P
      186747-65-9P 186747-66-0P 186747-68-2P
      186747-69-3P 186747-70-6P 186747-72-8P
      186747-74-0P 186747-76-2P 186747-78-4P
      186747-80-8P 186747-82-0P 186747-84-2P
      186747-85-3P 186747-87-5P 186747-88-6P
      186747-89-7P 186747-90-0P 186747-91-1P
      186747-92-2P 186747-93-3P 186747-94-4P
      186747-95-5P 186747-96-6P 186747-97-7P
      186747-98-8P 186747-99-9P 186748-00-5P
      186748-01-6P 186748-02-7P 186748-03-8P
      186748-04-9P 186748-05-0P 186748-06-1P
      186748-07-2P
```

(preparation of 3-phenylheterocycloalkyl-2,4-dione enols as pesticides and

herbicides)

#### IT 186747-50-2P

(preparation of 3-phenylheterocycloalkyl-2,4-dione enols as pesticides and herbicides)

RN 186747-50-2 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2-bromo-4,6-dimethylphenyl)-4-hydroxy-(9CI) (CA INDEX NAME)

L90 ANSWER 23 OF 43 USPATFULL on STN

AN 2002:17324 USPATFULL

TI 2- and 2,5-substituted phenylketoenols

IN Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Wachendorff-Neuman, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF Turberg, Andreas, Erkrath, GERMANY, FEDERAL REPUBLIC OF

PI US 2002010204 A1 20020124 US 6359151 B2 20020319

AI US 2001-809619 A1 20010315 (9)

RLI Division of Ser. No. US 2000-548129, filed on 12 Apr 2000, GRANTED, Pat. No. US 6255342 Division of Ser. No. US 1999-230653, filed on 28 Jan 1999, GRANTED, Pat. No. US 6114374

PRAI DE 1996-19631586 19960805 <--DE 1997-19716591 19970421 <---

DT Utility

FS APPLICATION

LREP BAYER CORPORATION, PATENT DEPARTMENT, 100 BAYER ROAD, PITTSBURGH, PA, 15205

CLMN Number of Claims: 21

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3619

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to novel phenyl-substituted cyclic ketoenols of the formula (I) ##STR1##

in which

Het represents one of the groups ##STR2##

in which A, B, D, G, X and Z are each as defined in the description, to a plurality of processes and intermediates for their preparation, and to their use as pesticides.

```
L90 ANSWER 24 OF 43 USPATFULL on STN
ΆN
       2001:202667 USPATFULL
       Alkyl dihalogenated phenyl-substituted ketoenols useful as pesticides
TI
       and herbicides
       Lieb, Folker, Leverkusen, Germany, Federal Republic of
IN
       Hagemann, Hermann, Leverkusen, Germany, Federal Republic of
       Widdig, Arno, Odenthal, Germany, Federal Republic of
       Ruther, Michael, Monheim, Germany, Federal Republic of
       Fischer, Reiner, Monheim, Germany, Federal Republic of
       Bretschneider, Thomas, Lohmar, Germany, Federal Republic of
       Erdelen, Christoph, Leichlingen, Germany, Federal Republic of
       Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of
       Dahmen, Peter, Neuss, Germany, Federal Republic of
       Dollinger, Markus, Leverkusen, Germany, Federal Republic of
       Santel, Hans-Joachim, Leverkusen, Germany, Federal Republic of
       Graff, Alan, Kooln, Germany, Federal Republic of
       Andersch, Wolfram, Bergisch Gladbach, Germany, Federal Republic of
       Mencke, Norbert, Leverkusen, Germany, Federal Republic of
       Turberg, Andreas, Erkrath, Germany, Federal Republic of
       Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
PA
       (non-U.S. corporation)
       US 6316486
                               20011113
PT
       WO 9635664 19961114
                                                                     <--
       US 1997-945664
                               19971031 (8)
ΑI
       WO 1996-EP1781
                               19960429
                               19971031 PCT 371 date
                               19971031 PCT 102(e) date
       DE 1995-19516258
                           19950509
PRAT
       DE 1995-19545467
                           19951206
DT
       Utility
FS
       GRANTED
      Primary Examiner: Shah, Mukund J.; Assistant Examiner: Truong, Tamthom
EXNAM
LREP
       Norris McLaughlin & Marcus
CLMN
       Number of Claims: 9
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 4207
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
```

The present invention relates to new compounds of the formula AB (I) ##STR1## in which X represents halogen, Y represents halogen or alkyl and Z represents halogen or alkyl, with the proviso that always one of the radicals Y and Z represents halogen while the other represents alkyl, and Het represents one of the groups ##STR2## in which A, B, D and G have the meanings given in the description, to a plurality of processes for their preparation and to their use as pesticides and herbicides. CAS INDEXING IS AVAILABLE FOR THIS PATENT. ΙT 185151-67-1P (preparation of alkyldihalophenyl-substituted keto enols as pesticides and herbicides) 185151-68-2P 185151-69-3P 185151-70-6P ΙT 185151-71-7P 185151-72-8P 185151-73-9P 185151-74-0P 185151-75-1P 185151-76-2P 185151-77-3P 185151-78-4P 185151-79-5P 185151-80-8P 185151-81-9P 185151-82-0P 185151-83-1P 185151-84-2P 185151-85-3P 185151-86-4P 185151-87-5P 185151-88-6P 185151-89-7P 185151-91-1P 185151-93-3P 185151-94-4P 185151-96-6P 185151-98-8P 185152-00-5P 185152-01-6P 185152-02-7P 185152-03-8P 185152-04-9P 185152-05-0P 185152-07-2P 185152-08-3P 185152-09-4P 185152-11-8P 185152-12-9P 185152-13-0P 185152-14-1P 185152-15-2P 185152-16-3P 185152-17-4P 185152-18-5P 185152-19-6P 185152-20-9P 185152-21-0P 185152-22-1P 185152-23-2P 185152-24-3P 185152-25-4P 185152-26-5P 185152-27-6P 185152-28-7P 185152-30-1P (preparation of alkyldihalophenyl-substituted keto enols as pesticides and herbicides) IT 185151-67-1P (preparation of alkyldihalophenyl-substituted keto enols as pesticides and herbicides) 185151-67-1 USPATFULL RN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2,4-dichloro-6-methylphenyl)-4-hydroxy-CN

(9CI) (CA INDEX NAME)

```
L90 ANSWER 25 OF 43 USPATFULL on STN
       2001:152998 USPATFULL
       Substituted phenylketoenols and their use as pesticides and herbicides
       Hagemann, Hermann, Leverkusen, Germany, Federal Republic of
       Fischer, Reiner, Monheim, Germany, Federal Republic of
       Bretschneider, Thomas, Lohmar, Germany, Federal Republic of
       Erdelen, Christoph, Leichlingen, Germany, Federal Republic of
       Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of
       Dahmen, Peter, Neuss, Germany, Federal Republic of
       Dollinger, Markus, Overland Park, KS, United States
       Graff, Alan, Koln, Germany, Federal Republic of
       Andersch, Wolfram, Bergisch Gladbach, Germany, Federal Republic of
       Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
PA
       (non-U.S. corporation)
                               20010911
       US 6288102
PΙ
                                                                     <--
       WO 9825928 19980618
                               19990604 (9)
       US 1999-319489
       WO 1997-EP6708
                               19971201
                               19990604 PCT 371 date
                               19990604 PCT 102(e) date
                                                                     <--
PRAI
       DE 1996-19651686
                           19961212
DT
       Utility
       GRANTED
FS
EXNAM Primary Examiner: Solola, T. A.
       Gil, Joseph C., Franks, James R., Zurcher, Jackie Ann
LREP
CLMN
       Number of Claims: 8
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 2578
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The invention relates to novel phenyl-substituted cyclic ketoenols of
       the formula (I) ##STR1##
       in which
```

Het represents one of the groups ##STR2##

and G, V, W, X, Y and Z are each as defined in the description,

to processes and intermediates for their preparation and to their use as pesticides and herbicides.

```
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

1T 209111-40-0P 209111-41-1P 209111-42-2P
209111-43-3P 209111-44-4P 209111-45-5P
209111-46-6P 209111-47-7P 209111-48-8P
209111-49-9P 209111-50-2P 209111-51-3P
209111-52-4P 209111-53-5P 209111-54-6P
209111-55-7P 209111-56-8P 209111-57-9P
```

209111-58-0P 209111-59-1P 209111-60-4P

209111-61-5P 209111-62-6P

(preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivs. and analogs as herbicides and pesticides)

IT 209111-40-0P

(preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivs. and analogs as herbicides and pesticides)

RN 209111-40-0 USPATFULL

CN 1,7-Dioxaspiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,6-trimethylphenyl)(9CI) (CA INDEX NAME)

L90 ANSWER 26 OF 43 USPATFULL on STN

AN 2001:102852 USPATFULL

TI 2-and 2,5-substituted phenylketoenols

IN Lieb, Folker, Leverkusen, Germany, Federal Republic of Fischer, Reiner, Monheim, Germany, Federal Republic of Bretschneider, Thomas, Lohmar, Germany, Federal Republic of Ruther, Michael, Monheim, Germany, Federal Republic of Graff, Alan, Koln, Germany, Federal Republic of Schneider, Udo, Leverkusen, Germany, Federal Republic of Erdelen, Christoph, Leichlingen, Germany, Federal Republic of Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of Andersch, Wolfram, Bergisch Gladbach, Germany, Federal Republic of Turberg, Andreas, Erkrath, Germany, Federal Republic of

PA Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of

(non-U.S. corporation)

PI US 6255342 B1 20010703 AI US 2000-548129 20000412 (9)

RLI Division of Ser. No. US 230653, now patented, Pat. No. US 6114374

PRAI DE 1996-19631586 19960805 <-DE 1997-19716591 19970421 <--

DT Utility

FS GRANTED

EXNAM Primary Examiner: Lambkin, Deborah C.

LREP Gil, Joseph C.

CLMN Number of Claims: 2

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3071

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to novel phenyl-substituted cyclic ketoenols of the formula (I) ##STR1##

in which

Het represents one of the groups ##STR2##

in which A, B, D, G, X and Z are each as defined in the description, to

a plurality of processes and intermediates for their preparation, and to their use as pesticides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. 203313-73-9P 203313-74-0P 203313-75-1P 203313-76-2P 203313-77-3P 203313-78-4P 203313-79-5P 203313-80-8P 203313-81-9P 203313-82-0P 203313-83-1P 203313-84-2P 203313-85-3P 203313-86-4P 203313-87-5P 203313-88-6P 203313-89-7P (preparation of phenyl-substituted heterocyclic ketoenols as pesticides) TΤ 203313-73-9P (preparation of phenyl-substituted heterocyclic ketoenols as pesticides) 203313-73-9 USPATFULL RN1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2-chlorophenyl)-4-hydroxy- (9CI) CN INDEX NAME)

```
L90 ANSWER 27 OF 43 USPATFULL on STN
       2001:97854 USPATFULL
AN
       Dialkyl-halogenophenyl-substituted ketoenols
TΙ
       Fischer, Reiner, Monheim, Germany, Federal Republic of
IN
       Bretschneider, Thomas, Lohmar, Germany, Federal Republic of
       Hagemann, Hermann, Leverkusen, Germany, Federal Republic of
       Lieb, Folker, Leverkusen, Germany, Federal Republic of
       Ruther, Michael, Monheim, Germany, Federal Republic of
       Widdig, Arno, Odenthal, Germany, Federal Republic of
       Dahmen, Peter, Neuss, Germany, Federal Republic of
       Dollinger, Markus, Leverkusen, Germany, Federal Republic of
       Erdelen, Christoph, Leichlingen, Germany, Federal Republic of
       Santel, Hans-Joachim, Leverkusen, Germany, Federal Republic of
       Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of
       Graff, Alan, Koln, Germany, Federal Republic of
       Andersch, Wolfram, Bergisch Gladbach, Germany, Federal Republic of
       Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
PΑ
       (non-U.S. corporation)
                               20010626
PΙ
       US 6251830
                               19990726 (9)
       US 1999-360510
ΑI
       Division of Ser. No. US 981610, now patented, Pat. No. US 5994274
RLI
       DE 1995-19523850 · 19950630
                                                                     <--
PRAI
                                                                     <--
       DE 1996-19603332
                           19960131
DT
       Utility
FS
       GRANTED
EXNAM Primary Examiner: Raymond, Richard L.
       Norris McLaughlin & Marcus
LREP
       Number of Claims: 9
CLMN
       Exemplary Claim: 1
ECL
DRWN
       No Drawings
LN.CNT 4379
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to new compounds of the formula
       (I) ##STR1##
```

in which

X represents alkyl,

Y represents halogen or alkyl and

Z represents halogen or alkyl,

with the proviso that one of the radicals Y and Z always represents halogen and the other alkyl,

Het represents one of the groups ##STR2##

in which

A, B, D and G have the meanings given in the description,

a plurality of processes for their preparation and their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. 186747-50-2P 186747-51-3P 186747-52-4P 186747-53-5P 186747-54-6P 186747-55-7P 186747-56-8P 186747-57-9P 186747-58-0P 186747-59-1P 186747-60-4P 186747-61-5P 186747-62-6P 186747-63-7P 186747-64-8P 186747-65-9P 186747-66-0P 186747-68-2P 186747-69-3P 186747-70-6P 186747-72-8P 186747-74-0P 186747-76-2P 186747-78-4P 186747-80-8P 186747-82-0P 186747-84-2P 186747-85-3P 186747-87-5P 186747-88-6P 186747-89-7P 186747-90-0P 186747-91-1P 186747-92-2P 186747-93-3P 186747-94-4P 186747-95-5P 186747-96-6P 186747-97-7P 186747-98-8P 186747-99-9P 186748-00-5P 186748-01-6P 186748-02-7P 186748-03-8P 186748-04-9P 186748-05-0P 186748-06-1P 186748-07-2P

(preparation of 3-phenylheterocycloalkyl-2,4-dione enols as pesticides and herbicides)

186747-50-2P

(preparation of 3-phenylheterocycloalkyl-2,4-dione enols as pesticides and herbicides)

186747-50-2 USPATFULL RN

1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2-bromo-4,6-dimethylphenyl)-4-hydroxy-CN (9CI) (CA INDEX NAME)

L90 ANSWER 28 OF 43 USPATFULL on STN

2001:95457 USPATFULL AN

Substituted phenyl keto enols as pesticides and herbicides TI

Lieb, Volker, Leverkusen, Germany, Federal Republic of ΙN Hagemann, Hermann, Leverkusen, Germany, Federal Republic of Widdig, Arno, Odenthal, Germany, Federal Republic of Ruther, Michael, Monheim, Germany, Federal Republic of Fischer, Reiner, Monheim, Germany, Federal Republic of Bretschneider, Thomas, Lohmar, Germany, Federal Republic of Erdelen, Christoph, Leichlingen, Germany, Federal Republic of Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of Graff, Alan, Koln, Germany, Federal Republic of Schneider, Udo, Leverkusen, Germany, Federal Republic of PΙ US 2001004629 A1 20010621 US 6271180 20010807 B2 20000414 (9) US 2000-550105 Α1 ΑT Division of Ser. No. US 1998-155637, filed on 29 Sep 1998, GRANTED, Pat. RLI No. US 6140358 A 371 of International Ser. No. WO 1997-EP1426, filed on 21 Mar 1997, UNKNOWN 19960402 PRAI DE 1996-19613171 <--DE 1996-19649665 19961129 DT Utility APPLICATION FS Bayer Corporation, Patent Department, 100 Bayer Rd, Pittsburgh, PA, LREP 15205-9741 CLMN Number of Claims: 20 ECL Exemplary Claim: 1 No Drawings DRWN LN.CNT 4070 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The present invention relates to novel compounds of the formula ##STR1## (I) in which Het represents one of the groups ##STR2## in which A, B, D, G, V, W, X, Y and Z are as defined in the description, processes and intermediates for their preparation, and to their use as pesticides and herbicides. CAS INDEXING IS AVAILABLE FOR THIS PATENT. 197710-62-6P 197710-64-8P (preparation of arylheterocyclic keto enols as insecticides and acaricides) 197710-65-9P 197710-66-0P 197710-67-1P ΙT 197710-68-2P 197710-69-3P 197710-70-6P 197710-71-7P 197710-72-8P 197710-73-9P 197710-74-0P 197710-75-1P 197710-76-2P 197710-77-3P (preparation of arylheterocyclic keto enols as insecticides and acaricides) 197710-62-6P (preparation of arylheterocyclic keto enols as insecticides and acaricides) 197710-62-6 USPATFULL RN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(3-chloro-2,6-dimethylphenyl)-4-hydroxy-CN

(9CI) (CA INDEX NAME)

```
ANSWER 29 OF 43 USPATFULL on STN
L90
ΑN
       2000:146404 USPATFULL
       Substituted phenyl keto enols as pesticides and herbicides
TI
       Lieb, Volker, Leverkusen, Germany, Federal Republic of
IN
       Hagemann, Hermann, Leverkusen, Germany, Federal Republic of
       Widdig, Arno, Odenthal, Germany, Federal Republic of
       Ruther, Michael, Monheim, Germany, Federal Republic of
       Fischer, Reiner, Monheim, Germany, Federal Republic of
       Bretschneider, Thomas, Lohmar, Germany, Federal Republic of
       Erdelen, Christoph, Leichlingen, Germany, Federal Republic of
       Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of
       Graff, Alan, Koln, Germany, Federal Republic of
       Schneider, Udo, Leverkusen, Germany, Federal Republic of
       Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
PA
       (non-U.S. corporation)
                               20001031
PΙ
       US 6140358
       WO 9736868
                                                                     <---
                  19971009
       US 1998-155637
                               19980929 (9)
ΑI
       WO 1997-EP1426
                               19970321
                               19980929
                                         PCT 371 date
                               19980929 PCT 102(e) date
PRAI
       DE 1996-19613171
                           19960402
                                                                     <--
                           19961129
                                                                     <--
       DE 1996-19649665
DT
       Utility
FS
       Granted
EXNAM Primary Examiner: Lambkin, Deborah C.
LREP
       Gil, Joseph C., Marmo, Carol
CLMN
       Number of Claims: 14
ECL
       Exemplary Claim: 1
       No Drawings
DRWN
LN.CNT 4059
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to novel compounds of the formula
       (I) ##STR1## in which Het represents one of the groups ##STR2## in which
       A, B, D, G, V, W, X, Y and Z are as defined in the description,
       processes and intermediates for their preparation, and to their use as
       pesticides and herbicides.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     197710-62-6P 197710-64-8P
        (preparation of arylheterocyclic keto enols as insecticides and acaricides)
     197710-65-9P 197710-66-0P 197710-67-1P
IT
      197710-68-2P 197710-69-3P 197710-70-6P
      197710-71-7P 197710-72-8P 197710-73-9P
      197710-74-0P 197710-75-1P 197710-76-2P
      197710-77-3P
        (preparation of arylheterocyclic keto enols as insecticides and acaricides)
IT 197710-62-6P
```

(preparation of arylheterocyclic keto enols as insecticides and acaricides)

RN 197710-62-6 USPATFULL

203313-88-6P 203313-89-7P

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(3-chloro-2,6-dimethylphenyl)-4-hydroxy-(9CI) (CA INDEX NAME)

```
L90 ANSWER 30 OF 43 USPATFULL on STN
      2000:117755 USPATFULL
AN
       2-and 2,5-substituted phenylketoenols
TI
      Lieb, Folker, Leverkusen, Germany, Federal Republic of
      Fischer, Reiner, Monheim, Germany, Federal Republic of
      Bretschneider, Thomas, Lohmar, Germany, Federal Republic of
      Ruther, Michael, Monheim, Germany, Federal Republic of
      Graff, Alan, Koln, Germany, Federal Republic of
      Schneider, Udo, Leverkusen, Germany, Federal Republic of
      Erdelen, Christoph, Leichlingen, Germany, Federal Republic of
      Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of
      Andersch, Wolfram, Bergisch Gladbach, Germany, Federal Republic of
      Turberg, Andreas, Erkrath, Germany, Federal Republic of
      Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
PΑ
       (non-U.S. corporation)
                               20000905
ΡI
      US 6114374
                                                                     <--
      WO 9805638 19980212
      US 1999-230653
                               19990128 (9)
ΑI
                               19970723
      WO 1997-EP3973
                               19990128 PCT 371 date
                               19990128 PCT 102(e) date
                           19960805
                                                                     <--
PRAI
      DE 1996-19631586
                           19970421
                                                                     <---
      DE 1997-19716591
DT
      Utility
FS
      Granted
EXNAM Primary Examiner: Lambkin, Deborah C.
LREP
      Gil, Joseph C.
CLMN
      Number of Claims: 13
ECL
       Exemplary Claim: 1
DRWN
      No Drawings
LN.CNT 3572
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The invention relates to novel phenyl-substituted cyclic ketoenols of
       the formula (I) ##STR1## in which Het represents one of the
       groups ##STR2## in which A, B, D, G, X and Z are each as defined in the
       description, to a plurality of processes and intermediates for their
      preparation, and to their use as pesticides.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     203313-73-9P 203313-74-0P 203313-75-1P
      203313-76-2P 203313-77-3P 203313-78-4P
      203313-79-5P 203313-80-8P 203313-81-9P
      203313-82-0P 203313-83-1P 203313-84-2P
      203313-85-3P 203313-86-4P 203313-87-5P
```

(preparation of phenyl-substituted heterocyclic ketoenols as pesticides)

#### IT 203313-73-9P

(preparation of phenyl-substituted heterocyclic ketoenols as pesticides)

RN 203313-73-9 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2-chlorophenyl)-4-hydroxy- (9CI) (CA INDEX NAME)

```
L90 ANSWER 31 OF 43 USPATFULL on STN
```

AN 2000:113899 USPATFULL

TI 2,4,5-trisubstituted phenylketo-enols for use as pesticides and herbicides

Lieb, Folker, Leverkusen, Germany, Federal Republic of
Hagemann, Hermann, Leverkusen, Germany, Federal Republic of
Widdig, Arno, Odenthal, Germany, Federal Republic of
Ruther, Michael, Monheim, Germany, Federal Republic of
Fischer, Reiner, Monheim, Germany, Federal Republic of
Bretschneider, Thomas, Lohmar, Germany, Federal Republic of
Erdelen, Christoph, Leichlingen, Germany, Federal Republic of
Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of
Santel, Hans-Joachim, Leverkusen, Germany, Federal Republic of
Dollinger, Markus, Leverkusen, Germany, Federal Republic of
Graff, Alan, Koln, Germany, Federal Republic of
Mencke, Norbert, Leverkusen, Germany, Federal Republic of
Turberg, Andreas, Erkrath, Germany, Federal Republic of
Dahmen, Peter, Neuss, Germany, Federal Republic of

PA Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

PI US 6110872 20000829

WO 9701535 19970116

US 1997-983028 19971222 (8)

WO 1996-EP2606 19960617

19971222 PCT 371 date 19971222 PCT 102(e) date

PRAI DE 1995-19523471 19950628 <-DE 1996-19602524 19960125 <--

DT Utility

FS Granted EXNAM Primary Examiner: Ford, John M.; Assistant Examiner: Kifle, Bruck

LREP Norris, McLaughlin & Marcus, P.A.

CLMN Number of Claims: 6 ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3765

AΤ

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to new phenyl-substituted cyclic ketoenols of the formula (I) in which

Het represents one of the groups #STR1## wherein A, B, D, G, X, Y and Z have the meaning given in the description, several processes and intermediate products for their preparation and their use as pest control agents and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 186647-66-5P 186647-67-6P 186647-68-7P

186647-69-8P 186647-70-1P 186647-71-2P 186647-72-3P 186647-73-4P 186647-74-5P 186647-75-6P 186647-76-7P 186647-77-8P 186647-78-9P 186647-79-0P 186647-80-3P 186647-81-4P 186647-82-5P 186647-83-6P 186647-85-8P 186647-86-9P 186647-88-1P 186647-90-5P 186647-92-7P 186647-94-9P 186647-96-1P 186647-97-2P 186647-98-3P

(preparation of 3-phenylheterocycloalkyl-2,4-dione enols as herbicides and pesticides)

IT 186647-66-5P

(preparation of 3-phenylheterocycloalkyl-2,4-dione enols as herbicides and pesticides)

RN 186647-66-5 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,5-trimethylphenyl)- (9CI) (CA INDEX NAME)

ANSWER 32 OF 43 USPATFULL on STN L90 2000:47380 USPATFULL AN TI 3-aryl-tetronic acid derivatives IN Fischer, Reiner, Monheim, Germany, Federal Republic of Bretschneider, Thomas, Lohmar, Germany, Federal Republic of Beck, Gunther, Leverkusen, Germany, Federal Republic of Hagemann, Hermann, Leverkusen, Germany, Federal Republic of Erdelen, Christoph, Leichlingen, Germany, Federal Republic of Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of Andersch, Wolfram, Bergisch Gladbach, Germany, Federal Republic of Mencke, Norbert, Leverkusen, Germany, Federal Republic of Turberg, Andreas, Erkrath, Germany, Federal Republic of PA Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation) PΙ US 6051723 20000418 ΑI US 1998-133522 19980813 (9) RLI Division of Ser. No. US 860106 PRAI DE 1994-4446335 19941223 <---DE 1995-19540736 19951102 <--DT Utility FS Granted Primary Examiner: Dentz, Bernard EXNAM Norris, McLaughlin & Marcus, P.A. LREP Number of Claims: 2 CLMN ECL Exemplary Claim: 1 No Drawings DRWN LN.CNT 1877 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The present invention relates to new 3-aryl-4-hydroxy- $\Delta$ .sup.3 -dihydrofuranone derivatives of the formula (I) ##STR1## inwhich A and B together with the carbon atom to which they are bonded form an unsubstituted or substituted 5- to 7-membered ring which is interrupted by at least one hetero atom,

X represents alkyl, halogen or alkoxy,

Y represents hydrogen, alkyl, halogen, alkoxy or halogenoalkyl,

Z represents alkyl, halogen or alkoxy,

n represents a number 0, 1, 2 or 3,

G represents hydrogen (a) or one of the groups ##STR2## E represents a metal ion equivalent or an ammonium ion, L represents oxygen or sulphur,

M represents oxygen or sulphur and

R.sup.1, R.sup.2, R.sup.3, R.sup.4, R.sup.5, R.sup.6 and R.sup.7 have the meanings given in the description, to processes for their preparation, and to their use as pesticides.

```
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    179635-07-5P 179635-08-6P 179635-09-7P
      179635-10-0P 179635-11-1P 179635-12-2P
      179635-13-3P 179635-14-4P 179635-15-5P
      179635-16-6P 179635-17-7P 179635-18-8P
      179635-19-9P 179635-20-2P 179635-21-3P
      179635-22-4P 179635-23-5P 179635-24-6P
      179635-25-7P 179635-26-8P 179635-27-9P
      179635-28-0P 179635-29-1P 179635-30-4P
      179635-31-5P 179635-32-6P 179635-33-7P
      179635-34-8P 179635-35-9P 179635-36-0P
      179635-37-1P 179635-38-2P 179635-39-3P
      179635-40-6P 179635-41-7P 179635-42-8P
      179635-43-9P 179635-44-0P 179635-45-1P
      179635-46-2P 179635-47-3P 179635-48-4P
      179635-49-5P 179635-50-8P 179635-51-9P
     179635-52-0P 179635-53-1P
        (preparation of alkanoyloxyfuranones as pesticides)
IT 179635-07-5P
        (preparation of alkanoyloxyfuranones as pesticides)
    179635-07-5 USPATFULL
    1,8-Dioxaspiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,6-trimethylphenyl)-
CN
       (9CI) (CA INDEX NAME)
```

L90 ANSWER 33 OF 43 USPATFULL on STN

AN 1999:155657 USPATFULL

TI Dialkyl phenyl halide-substituted keto-enols for use as herbicides and pesticides

IN Fischer, Reiner, Monheim, Germany, Federal Republic of Bretschneider, Thomas, Lohmar, Germany, Federal Republic of Hagemann, Hermann, Leverkusen, Germany, Federal Republic of Lieb, Folker, Leverkusen, Germany, Federal Republic of Ruther, Michael, Monheim, Germany, Federal Republic of

Widdig, Arno, Odenthal, Germany, Federal Republic of Dahmen, Peter, Neuss, Germany, Federal Republic of Dollinger, Markus, Leverkusen, Germany, Federal Republic of Erdelen, Christoph, Leichlingen, Germany, Federal Republic of Santel, Hans-Joachim, Leverkusen, Germany, Federal Republic of Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of Graff, Alan, Koln, Germany, Federal Republic of Andersch, Wolfram, Bergisch Gladbach, Germany, Federal Republic of PA Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation) PΙ US 5994274 19991130 WO 9702243 19970123 <--ΑI US 1997-981610 19971223 (8) WO 1996-EP2601 19960617 19971223 PCT 371 date 19971223 PCT 102(e) date PRAI DE 1995-19523850 19950630 <--DE 1996-19503332 19960131 <---DTUtility FS Granted EXNAM Primary Examiner: Raymond, Richard L. LREP Sprung Kramer Schaefer & Briscoe CLMN Number of Claims: 9 ECL Exemplary Claim: 1 DRWN No Drawings LN.CNT 4674 CAS INDEXING IS AVAILABLE FOR THIS PATENT. The present invention relates to new compounds of the formula (I) ##STR1## in which X represents alkyl,

Y represents halogen or alkyl and

Z represents halogen or alkyl,

with the proviso that one of the radicals Y and Z always represents halogen and the other alkyl,

Het represents one of the groups ##STR2## in which A, B, D and G have the meanings given in the description,

a plurality of processes for their preparation and their use as pesticides and herbicides.

```
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     186747-50-2P 186747-51-3P 186747-52-4P
      186747-53-5P 186747-54-6P 186747-55-7P
      186747-56-8P 186747-57-9P 186747-58-0P
      186747-59-1P 186747-60-4P 186747-61-5P
      186747-62-6P 186747-63-7P 186747-64-8P
      186747-65-9P 186747-66-0P 186747-68-2P
      186747-69-3P 186747-70-6P 186747-72-8P
      186747-74-0P 186747-76-2P 186747-78-4P
      186747-80-8P 186747-82-0P 186747-84-2P
      186747-85-3P 186747-87-5P 186747-88-6P
      186747-89-7P 186747-90-0P 186747-91-1P
      186747-92-2P 186747-93-3P 186747-94-4P
      186747-95-5P 186747-96-6P 186747-97-7P
      186747-98-8P 186747-99-9P 186748-00-5P
      186748-01-6P 186748-02-7P 186748-03-8P
      186748-04-9P 186748-05-0P 186748-06-1P
```

186748-07-2P

(preparation of 3-phenylheterocycloalkyl-2,4-dione enols as pesticides and herbicides)

### IT 186747-50-2P

(preparation of 3-phenylheterocycloalkyl-2,4-dione enols as pesticides and herbicides)

RN 186747-50-2 USPATFULL

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2-bromo-4,6-dimethylphenyl)-4-hydroxy-(9CI) (CA INDEX NAME)

```
L90 ANSWER 34 OF 43 USPATFULL on STN
       1998:134974 USPATFULL
ΑN
TI
       3-aryl-tetronic acid derivatives, the production thereof and the use
       thereof as antiparasitic agents
       Fischer, Reiner, Monheim, Germany, Federal Republic of
IN
       Bretschneider, Thomas, Lohmar, Germany, Federal Republic of
       Beck, Gunther, Leverkusen, Germany, Federal Republic of
       Hagemann, Hermann, Leverkusen, Germany, Federal Republic of
       Erdelen, Christoph, Leichlingen, Germany, Federal Republic of
       Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of
       Andersch, Wolfram, Bergisch Gladbach, Germany, Federal Republic of
       Mencke, Norbert, Leverkusen, Germany, Federal Republic of
       Turberg, Andreas, Erkrath, Germany, Federal Republic of
PA
       Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
       (non-U.S. corporation)
       US 5830825
                               19981103
                                                                     <--
PΤ
       WO 9620196 19960704
                                                                     <--
       US 1997-860106
                               19970617 (8)
AΙ
      WO 1995-EP4869
                               19951211
                               19970617
                                         PCT 371 date
                               19970617 PCT 102(e) date
PRAI
      DE 1994-4446335
                           19941223
      DE 1995-19540736
                           19951102
                                                                     <--
DT
      Utility
FS
      Granted
EXNAM Primary Examiner: Dentz, Bernard
LREP
      Sprung Kramer Schaefer & Briscoe
      Number of Claims: 8
CLMN
ECL
      Exemplary Claim: 1
DRWN
      No Drawings
LN.CNT 2162
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
      The present invention relates to new 3-aryl-4-hydroxy-\Delta.sup.3
       -dihydrofuranone derivatives of the formula (I) ##STR1## in
       which A and B together with the carbon atom to which they are
      bonded form an unsubstituted or substituted 5- to 7-membered ring which
       is interrupted by at least one hetero atom,
```

X represents alkyl, halogen or alkoxy,

Y represents hydrogen, alkyl, halogen, alkoxy or halogenoalkyl,

Z represents alkyl, halogen or alkoxy,

n represents a number 0, 1, 2 or 3,

G represents hydrogen (a) or one of the groups ##STR2## E represents a metal Ion equivalent or an ammonium ion, L represents oxygen or sulphur,

M represents oxygen or sulphur and

R.sup.1, R.sup.2, R.sup.3, R.sup.4, R.sup.5, R.sup.6 and R.sup.7 have the meanings given in the description, to processes for their preparation, and to their use as pesticides.

```
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    179635-07-5P 179635-08-6P 179635-09-7P
     179635-10-0P 179635-11-1P 179635-12-2P
     179635-13-3P 179635-14-4P 179635-15-5P
     179635-16-6P 179635-17-7P 179635-18-8P
     179635-19-9P 179635-20-2P 179635-21-3P
     179635-22-4P 179635-23-5P 179635-24-6P
     179635-25-7P 179635-26-8P 179635-27-9P
     179635-28-0P 179635-29-1P 179635-30-4P
     179635-31-5P 179635-32-6P 179635-33-7P
     179635-34-8P 179635-35-9P 179635-36-0P
     179635-37-1P 179635-38-2P 179635-39-3P
     179635-40-6P 179635-41-7P 179635-42-8P
     179635-43-9P 179635-44-0P 179635-45-1P
     179635-46-2P 179635-47-3P 179635-48-4P
     179635-49-5P 179635-50-8P 179635-51-9P
     179635-52-0P 179635-53-1P
        (preparation of alkanoyloxyfuranones as pesticides)
IT 179635-07-5P
        (preparation of alkanoyloxyfuranones as pesticides)
    179635-07-5 USPATFULL
RN
    1,8-Dioxaspiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,6-trimethylphenyl)-
CN
       (9CI) (CA INDEX NAME)
```

```
L90 ANSWER 35 OF 43 USPATFULL on STN

1998:17468 USPATFULL

TI 3-aryl-4-hydroxy-A.sup.3 -dihydrofuranone derivatives

IN Fischer, Reiner, Monheim, Germany, Federal Republic of
Bretschneider, Thomas, Lohmar, Germany, Federal Republic of
Kruger, Bernd-Wieland, Bergisch Gladbach, Germany, Federal Republic of
Santel, Hans-Joachim, Leverkusen, Germany, Federal Republic of
Dollinger, Markus, Leverkusen, Germany, Federal Republic of
Wachendorff-Neumann, Ulrike, Monheim, Germany, Federal Republic of
Erdelen, Christoph, Leichlingen, Germany, Federal Republic of
Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
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(non-U.S. corporation)
                                19980217
                                                                      <--
PΙ
       US 5719310
ΑI
       US 1996-740974
                                19961105 (8)
       Division of Ser. No. US 1994-303987, filed on 9 Sep 1994, now patented,
RLI
       Pat. No. US 5610122
PRAI
       DE 1993-4331672
                           19930917
                                                                      <--
       DE 1993-4337853
                           19931105
DT
       Utility
FS
       Granted
EXNAM Primary Examiner: Owens, Amelia Averill
LREP
       Sprung Kramer Schaefer & Briscoe
CLMN
       Number of Claims: 5
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 3182
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a new 3-aryl-4-hydroxy-\Delta.sup.3
       -dihydrofuranone derivatives of the general formula (I)
       ##STR1## in which the radicals A, B, G, X, Y, Z and n have the meaning
       given in the description, to a plurality of processes for their
       preparation, and to their use as pesticides.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     148477-69-4P 164153-44-0P 164153-45-1P
      164153-46-2P 164153-47-3P 164153-48-4P
      164153-49-5P 164153-50-8P 164153-51-9P
      164153-52-0P 164153-53-1P 164153-54-2P
      164153-55-3P 164153-56-4P 164153-57-5P
      164153-58-6P 164153-59-7P 164153-60-0P
      164153-61-1P 164153-62-2P 164153-63-3P
      164153-64-4P 164153-65-5P 164153-66-6P
      164153-67-7P 164153-68-8P 164153-69-9P
      164153-70-2P 164153-71-3P 164153-72-4P
      164153-73-5P 164153-74-6P 164153-75-7P
      164153-80-4P 164153-81-5P 164153-82-6P
      164153-83-7P 164153-84-8P 164153-85-9P
      164153-86-0P 164153-87-1P 164153-88-2P
      164153-89-3P 164153-90-6P 164153-91-7P
      164153-92-8P 164153-93-9P 164153-94-0P
      164153-95-1P 164153-96-2P 164153-97-3P
      164153-98-4P 164153-99-5P 164154-00-1P
      164154-01-2P 164154-02-3P 164154-03-4P
      164154-04-5P 164154-05-6P 164154-06-7P
      164154-07-8P 164154-08-9P 164154-09-0P
      164154-10-3P
        (preparation of 3-aryl-4-hydroxy-\Delta3-dihydrofuranones as pesticides)
ΙT
    148477-69-4P
        (preparation of 3-aryl-4-hydroxy-A3-dihydrofuranones as pesticides)
RN
     148477-69-4 USPATFULL
     Propanoic acid, 2,2-dimethyl-, 5'-oxo-4'-(2,4,6-
CN
       trimethylphenyl)spiro[bicyclo[2.2.1]hept-5-ene-2,2'(5'H)-furan]-3'-yl
       ester (9CI) (CA INDEX NAME)
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L90 ANSWER 36 OF 43 USPATFULL on STN
AN
        1998:12025 USPATFULL
TI
        \alpha-(1,3-dicarbonylenol ether) methyl ketones as cysteine protease
        Zimmerman, Mary P., Pleasonton, CA, United States
       Smith, Robert E., Livermore, CA, United States
Becker, Mark, Walnut Creek, CA, United States
Prototek, Inc., Dublin, CA, United States (U.S. corporation)
PΙ
        US 5714484
                                   19980203
        US 1995-481808
ΑI
                                   19950607 (8)
       Continuation-in-part of Ser. No. US 1993-164031, filed on 8 Dec 1993,
RLI
        now patented, Pat. No. US 5486623
DT
        Utility
FS
        Granted
       Primary Examiner: Shah, Mukuno J.; Assistant Examiner: Ngo, Tamthom T.
EXNAM
       Woodard, Emhardt, Naughton, Moriarty & McNett
LREP
CLMN
       Number of Claims: 3
ECL
        Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 1647
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       Cysteine protease inhibitors which deactivate the protease by covalently
       bonding to the cysteine protease and releasing the enolate of a
```

Cysteine protease inhibitors which deactivate the protease by covalently bonding to the cysteine protease and releasing the enolate of a 1,3-dicarbonyl (or its enolic form). The cysteine protease inhibitors of the present invention accordingly comprise a first portion which targets a desired cysteine protease and positions the inhibitor near the thiolate anion portion of the active site of the protease, and a second portion which covalently bonds to the cysteine protease and irreversibly deactivates that protease by providing a carbonyl or carbonyl-equivalent which is attacked by the thiolate anion of the active site of the cysteine protease to sequentially cleave a  $\beta$ -dicarbonyl enol ether leaving group.

# CAS INDEXING IS AVAILABLE FOR THIS PATENT.

## IT 186293-94-7P 186293-95-8P 186293-96-9P

(preparation of peptidyl  $\alpha\text{-(1,3-dicarbonyl enol ether)}$  Me ketones as cysteine protease inhibitors)

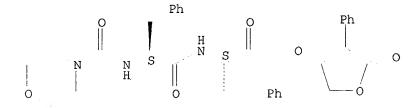
## IT 186293-94-7P

(preparation of peptidyl  $\alpha$ -(1,3-dicarbonyl enol ether) Me ketones as cysteine protease inhibitors)

RN 186293-94-7 USPATFULL

CN 4-Morpholinecarboxamide, N-[2-[[3-[(2,5-dihydro-5-oxo-4-phenyl-3-furanyl)oxy]-2-oxo-1-(2-phenylethyl)propyl]amino]-2-oxo-1-(phenylmethyl)ethyl]-, [S-(R\*,R\*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L90 ANSWER 37 OF 43 USPATFULL on STN

AN 97:101721 USPATFULL

TI Substituted aryl keto-enolic heterocycles

```
Bachmann, Jurgen, Weinheim an der Bergstrasse, Germany, Federal Republic
ΙN
       Bretschneider, Thomas, Lohmar, Germany, Federal Republic of
       Fischer, Reiner, Monheim, Germany, Federal Republic of
       Kruger, Bernd-Wieland, Bergisch Gladbach, Germany, Federal Republic of
       Santel, Hans-Joachim, Leverkusen, Germany, Federal Republic of
       Dollinger, Markus, Leverkusen, Germany, Federal Republic of
       Erdelen, Christoph, Leichlingen, Germany, Federal Republic of
       Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of
PA
       Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
       (non-U.S. corporation)
       US 5683965
PΙ
                               19971104
       WO 9501971 19950119
                                                                     <---
ΑI
       US 1996-569194
                               19960513 (8)
       WO 1994-EP2042
                               19940622
                                         PCT 371 date
                               19960513
                               19960513 PCT 102(e) date
       DE 1993-4322273
                                                                     <--
PRAI
                           19930705
       DE 1994-4413669
                           19940420
                                                                     <--
DT
       Utility
FS
       Granted
EXNAM
       Primary Examiner: McKane, Joseph; Assistant Examiner: Myers, Jr.,
       Richard S.
       Sprung Kramer Schaefer & Briscoe
LREP
CLMN
       Number of Claims: 13
ECL
       Exemplary Claim: 1
DRWN
       No Drawings
LN.CNT 1333
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The aryl-keto-enolic heterocycles according to the invention have the
       formula (I), in which Het stands for a heterocyclic group from
       the series (a), (b) or (c), and X, Y, Z, n, A, B, E, L and M have the
       meanings given in the description. The compounds having the
       formula (I) are pesticides, in particular acaricides,
       insecticides, fungicides and herbicides. Also disclosed is their
       preparation. ##STR1##
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     148476-10-2
        (O-alkylation of; preparation of substituted aryl keto-enol heterocycles as
        pesticides)
     161800-24-4P 161800-25-5P 161800-26-6P
      161800-27-7P 161800-28-8P 161800-29-9P
      161800-30-2P 161800-31-3P 161800-32-4P
      161800-33-5P 161800-34-6P 161800-35-7P
      161800-36-8P 161800-37-9P 161800-38-0P
      161800-39-1P 161800-40-4P 161800-41-5P
      161800-42-6P 161800-43-7P 161800-44-8P
      161800-45-9P 161800-46-0P 161800-47-1P
      161800-48-2P 161800-49-3P 161800-50-6P
      161800-51-7P 161800-52-8P 161800-53-9P
      161800-54-0P 161800-55-1P
        (preparation of substituted aryl keto-enol heterocycles as pesticides)
IT 148476-10-2
        (O-alkylation of; preparation of substituted aryl keto-enol heterocycles as
        pesticides)
RN
     148476-10-2 USPATFULL
CN
     1-0xaspiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,6-trimethylphenyl)- (9CI)
       (CA INDEX NAME)
```

```
L90 ANSWER 38 OF 43 USPATFULL on STN
       97:20492 USPATFULL
       3-aryl-4-hydroxy-delta3-dihydrofuranone derivatives
TI
       Fischer, Reiner, Monheim, Germany, Federal Republic of
       Bretschneider, Thomas, Lohmar, Germany, Federal Republic of
       Kr uger, Bernd-Wieland, Bergisch Gladbach, Germany, Federal Republic of
       Santel, Hans-Joachim, Leverkusen, Germany, Federal Republic of
       Dollinger, Markus, Leverkusen, Germany, Federal Republic of
       Wachendorff-Neumann, Ulrike, Monheim, Germany, Federal Republic of
       Erdelen, Christoph, Leichlingen, Germany, Federal Republic of
PA
       Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of
       (non-U.S. corporation)
PΙ
       US 5610122
                               19970311
       US 1994-303987
                               19940909 (8)
AΙ
PRAI
       DE 1993-4331672
                           19930917
       DE 1993-4337853
                           19931105
DT
       Utility
FS
       Granted
EXNAM Primary Examiner: Owens, Amelia A.
       Sprung Horn Kramer & Woods
LREP
CLMN
      Number of Claims: 14
ECL
       Exemplary Claim: 1
DRWN
      No Drawings
LN.CNT 3479
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to a new 3-aryl-4-hydroxy-\Delta.sup.3
       -dihydrofuranone derivatives of the general formula (I)
       ##STR1## in which the radicals A, B, G, X, Y, Z and n have the meaning
      given in the description, to a plurality of processes for their
      preparation, and to their use as pesticides.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
    148477-69-4P 164153-44-0P 164153-45-1P
      164153-46-2P 164153-47-3P 164153-48-4P
      164153-49-5P 164153-50-8P 164153-51-9P
      164153-52-0P 164153-53-1P 164153-54-2P
      164153-55-3P 164153-56-4P 164153-57-5P
      164153-58-6P 164153-59-7P 164153-60-0P
      164153-61-1P 164153-62-2P 164153-63-3P
      164153-64-4P 164153-65-5P 164153-66-6P
      164153-67-7P 164153-68-8P 164153-69-9P
      164153-70-2P 164153-71-3P 164153-72-4P
      164153-73-5P 164153-74-6P 164153-75-7P
      164153-80-4P 164153-81-5P 164153-82-6P
      164153-83-7P 164153-84-8P 164153-85-9P
      164153-86-0P 164153-87-1P 164153-88-2P
      164153-89-3P 164153-90-6P 164153-91-7P
      164153-92-8P 164153-93-9P 164153-94-0P
      164153-95-1P 164153-96-2P 164153-97-3P
      164153-98-4P 164153-99-5P 164154-00-1P
```

164154-01-2P 164154-02-3P 164154-03-4P 164154-04-5P 164154-05-6P 164154-06-7P

164154-07-8P 164154-08-9P 164154-09-0P 164154-10-3P

(preparation of 3-aryl-4-hydroxy- $\Delta$ 3-dihydrofuranones as pesticides)

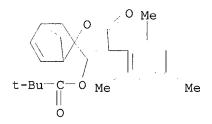
IT 148477-69-4P

(preparation of 3-aryl-4-hydroxy- $\Delta 3$ -dihydrofuranones as pesticides)

RN 148477-69-4 USPATFULL

CN Propanoic acid, 2,2-dimethyl-, 5'-oxo-4'-(2,4,6-

trimethylphenyl)spiro[bicyclo[2.2.1]hept-5-ene-2,2'(5'H)-furan]-3'-yl
ester (9CI) (CA INDEX NAME)



L90 ANSWER 39 OF 43 USPAT2 on STN

AN 2002:288164 USPAT2

TI Methods of making substituted phenylketoenols

IN Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Overland Park, KS, United States Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF Andersch, Wolfram, Leverkusen, GERMANY, FEDERAL REPUBLIC OF

PA Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF

(non-U.S. corporation)

PI US 6630594 B2 20031007

AI US 2002-59094 20020128 (10)

RLI Division of Ser. No. US 2001-895649, filed on 29 Jun 2001, now patented, Pat. No. US 6391912 Division of Ser. No. US 1999-319489, filed on 4 Jun 1999, now patented, Pat. No. US 6288102

PRAI DE 1996-19651686 19961212 <

DT Utility

FS GRANTED

EXNAM Primary Examiner: McKane, Joseph K.; Assistant Examiner: Wright, Sonya

LREP Henderson, Richard E. L., Mrozinski, Jr., John E.

CLMN Number of Claims: 3

ECL Exemplary Claim: 1

DRWN 0 Drawing Figure(s); 0 Drawing Page(s)

LN.CNT 2416

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides methods of making substituted phenylketoenols of the general formula I, ##STR1##

wherein V, W, X, Y, Z and Het are as defined herein. The compounds have pesticidal and herbicidal activity.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 209111-40-0P 209111-41-1P 209111-42-2P

209111-43-3P 209111-44-4P 209111-45-5P

209111-46-6P 209111-47-7P 209111-48-8P

209111-49-9P 209111-50-2P 209111-51-3P

209111-52-4P 209111-53-5P 209111-54-6P

209111-55-7P 209111-56-8P 209111-57-9P 209111-58-0P 209111-59-1P 209111-60-4P

209111-61-5P 209111-62-6P

(preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivs. and analogs as herbicides and pesticides)

IT 209111-40-0P

(preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivs. and analogs as herbicides and pesticides)

RN 209111-40-0 USPAT2

CN 1,7-Dioxaspiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,6-trimethylphenyl)(9CI) (CA INDEX NAME)

L90 ANSWER 40 OF 43 USPAT2 on STN

AN 2002:116298 USPAT2

TI Novel substituted phenylketoenols

IN Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF Dollinger, Markus, Overland Park, KS, UNITED STATES Graff, Alan, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Andersch, Wolfram, Leverkusen, GERMANY, FEDERAL REPUBLIC OF

PI US 2002072617 A1 20020613

AI US 2001-895649 A1 20010629 (9)

RLI Division of Ser. No. US 1999-319489, filed on 4 Jun 1999, GRANTED, Pat. No. US 6288102

PRAI DE 1996-19651686 19961212

DT Utility

FS APPLICATION

LREP BAYER CORPORATION, PATENT DEPARTMENT, 100 BAYER ROAD, PITTSBURGH, PA, 15205

CLMN Number of Claims: 19

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 2705

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to novel phenyl-substituted cyclic ketoenols of the formula (I) ##STR1##

in which

Het represents one of the groups ##STR2##

and G, V, W, X, Y and Z are each as defined in the description, to processes and intermediates for their preparation and to their use as pesticides and herbicides.

```
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     209111-40-0P 209111-41-1P 209111-42-2P
      209111-43-3P 209111-44-4P 209111-45-5P
      209111-46-6P 209111-47-7P 209111-48-8P
      209111-49-9P 209111-50-2P 209111-51-3P
      209111-52-4P 209111-53-5P 209111-54-6P
      209111-55-7P 209111-56-8P 209111-57-9P
      209111-58-0P 209111-59-1P 209111-60-4P
      209111-61-5P 209111-62-6P
        (preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivs.
        and analogs as herbicides and pesticides)
    209111-40-0P
        (preparation of spiro[tetrahydropyran-3,2'-pyrrolidine-3,5-dione] derivs.
        and analogs as herbicides and pesticides)
RN
     209111-40-0 USPAT2
CN
     1,7-Dioxaspiro[4.5]dec-3-en-2-one, 4-hydroxy-3-(2,4,6-trimethylphenyl)-
       (9CI) (CA INDEX NAME)
```

```
L90 ANSWER 41 OF 43 USPAT2 on STN
ÀΝ
        2002:37855 USPAT2
ΤI
        Dialkyl phenyl halide-substituted keto-enols for use as herbicides and
        Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
ΙN
        Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF Hagemann, Hermann, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
        Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF
        Widdig, Arno, Odenthal, GERMANY, FEDERAL REPUBLIC OF
        Dahmen, Peter, Neuss, GERMANY, FEDERAL REPUBLIC OF
        Dollinger, Markus, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
        Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
        Santel, Hans-Joachim, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
        Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF
        Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF
Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF
Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
PΑ
        (non-U.S. corporation)
PI
        US 6469196
                                      20021022
ΑI
        US 2001-839481
                                      20010420 (9)
RLI
        Division of Ser. No. US 1999-360510, filed on 26 Jul 1999, now patented,
        Pat. No. US 6251830 Division of Ser. No. US 981610, now patented, Pat.
        No. US 5994274
PRAI
        DE 1995-19523850
                                 19950630
                                                                                    <--
                                                                                   <--
        DE 1996-19603332
                                 19960131
DT
        Utility
FS
        GRANTED
EXNAM Primary Examiner: Raymond, Richard L.
```

```
LREP
       Norris McLaughlin & Marcus
CLMN
       Number of Claims: 3
ECL
       Exemplary Claim: 1
DRWN
       0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 3518
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The present invention relates to new compounds of the formula
           ##STR1##
       (I)
       in which
       X represents alkyl,
       Y represents halogen or alkyl and
       Z represents halogen or alkyl,
       with the proviso that one of the radicals Y and Z always represents
       halogen and the other alkyl,
       Het represents one of the groups ##STR2##
        in which
       A, B, D and G have the meanings given in the description,
       a plurality of processes for their preparation and their use as
       pesticides and herbicides.
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
     186747-50-2P 186747-51-3P 186747-52-4P
      186747-53-5P 186747-54-6P 186747-55-7P
      186747-56-8P 186747-57-9P 186747-58-0P
      186747-59-1P 186747-60-4P 186747-61-5P
      186747-62-6P 186747-63-7P 186747-64-8P
      186747-65-9P 186747-66-0P 186747-68-2P
      186747-69-3P 186747-70-6P 186747-72-8P
      186747-74-0P 186747-76-2P 186747-78-4P
      186747-80-8P 186747-82-0P 186747-84-2P
      186747-85-3P 186747-87-5P 186747-88-6P
      186747-89-7P 186747-90-0P 186747-91-1P
      186747-92-2P 186747-93-3P 186747-94-4P
      186747-95-5P 186747-96-6P 186747-97-7P
      186747-98-8P 186747-99-9P 186748-00-5P
      186748-01-6P 186748-02-7P 186748-03-8P
      186748-04-9P 186748-05-0P 186748-06-1P
      186748-07-2P
        (preparation of 3-phenylheterocycloalkyl-2,4-dione enols as pesticides and
        herbicides)
IT 186747-50-2P
        (preparation of 3-phenylheterocycloalkyl-2, 4-dione enols as pesticides and
        herbicides)
     186747-50-2 USPAT2
RN
     1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2-bromo-4,6-dimethylphenyl)-4-hydroxy-
CN
       (9CI) (CA INDEX NAME)
```

```
L90 ANSWER 42 OF 43 USPAT2 on STN
       2002:17324 USPAT2
       2- and 2,5-substituted phenylketoenols
ΤI
       Lieb, Folker, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
ΙN
       Fischer, Reiner, Monheim, GERMANY, FEDERAL REPUBLIC OF
       Bretschneider, Thomas, Lohmar, GERMANY, FEDERAL REPUBLIC OF
       Ruther, Michael, Monheim, GERMANY, FEDERAL REPUBLIC OF
       Graff, Alan, Koln, GERMANY, FEDERAL REPUBLIC OF
       Schneider, Udo, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
       Erdelen, Christoph, Leichlingen, GERMANY, FEDERAL REPUBLIC OF
       Wachendorff-Neumann, Ulrike, Neuwied, GERMANY, FEDERAL REPUBLIC OF
       Andersch, Wolfram, Bergisch Gladbach, GERMANY, FEDERAL REPUBLIC OF
       Turberg, Andreas, Erkrath, GERMANY, FEDERAL REPUBLIC OF
       Bayer Aktiengesellschaft, Leverkusen, GERMANY, FEDERAL REPUBLIC OF
PA
       (non-U.S. corporation)
                                20020319
PΙ
       US 6359151
                                20010315 (9)
       US 2001-809619
ΑI
       Division of Ser. No. US 2000-548129, filed on 12 Apr 2000, now patented,
RLI
       Pat. No. US 6255342 Division of Ser. No. US 230653, now patented, Pat.
       No. US 6114374
                                                                     <--
PRAI
       DE 1996-19631586
                           19960805
                                                                     <--
       DE 1997-19716591
                           19970421
DT
       Utility
       GRANTED
EXNAM
       Primary Examiner: Lambkin, Deborah C.
LREP
       Gil, Joseph C.
CLMN
       Number of Claims: 2
ECL
       Exemplary Claim: 1
       0 Drawing Figure(s); 0 Drawing Page(s)
DRWN
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
       The invention relates to novel phenyl-substituted cyclic ketoenols of
       the formula (I)
                       ##STR1##
```

in which

Het represents one of the groups ##STR2##

in which A, B, D, G, X and Z are each as defined in the description,

to a plurality of processes and intermediates for their preparation, and to their use as pesticides.

```
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

1T 203313-73-9P 203313-74-0P 203313-75-1P
203313-76-2P 203313-77-3P 203313-78-4P
203313-79-5P 203313-80-8P 203313-81-9P
203313-82-0P 203313-83-1P 203313-84-2P
203313-85-3P 203313-86-4P 203313-87-5P
```

#### 203313-88-6P 203313-89-7P

(preparation of phenyl-substituted heterocyclic ketoenols as pesticides)

IT 203313-73-9P

(preparation of phenyl-substituted heterocyclic ketoenols as pesticides)

RN 203313-73-9 USPAT2

CN 1-Oxaspiro[4.5]dec-3-en-2-one, 3-(2-chlorophenyl)-4-hydroxy- (9CI) (CA INDEX NAME)

```
L90 ANSWER 43 OF 43 USPAT2 on STN
```

AN 2001:95457 USPAT2

TI Substituted phenyl keto enols as pesticides and herbicides

Lieb, Volker, Leverkusen, Germany, Federal Republic of
Hagemann, Hermann, Leverkusen, Germany, Federal Republic of
Widdig, Arno, Odenthal, Germany, Federal Republic of
Ruther, Michael, Monheim, Germany, Federal Republic of
Fischer, Reiner, Monheim, Germany, Federal Republic of
Bretschneider, Thomas, Lohmar, Germany, Federal Republic of
Erdelen, Christoph, Leichlingen, Germany, Federal Republic of
Wachendorff-Neumann, Ulrike, Neuwied, Germany, Federal Republic of
Graff, Alan, Koln, Germany, Federal Republic of

Schneider, Udo, Leverkusen, Germany, Federal Republic of

PA Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

PI US 6271180 B2 20010807

AI US 2000-550105 20000414 (9)

RLI Division of Ser. No. US 155637

PRAI DE 1996-19613171 19960402 <-DE 1996-19649665 19961129 <-

DT Utility
FS GRANTED

EXNAM Primary Examiner: Lambkin, Deborah C.

LREP Gil, Joseph C., Harmuth, Raymond J.

CLMN Number of Claims: 7

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 3970

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel compounds of the **formula** (I) ##STR1##

in which

Het represents one of the groups ##STR2##

in which

A, B, D, G, V, W, X, Y and Z are as defined in the description, processes and intermediates for their preparation, and to their use as pesticides and herbicides.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 197710-62-6P 197710-64-8P

(preparation of arylheterocyclic keto enols as insecticides and acaricides)

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=> d his
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L3

(FILE 'HOME' ENTERED AT 13:51:26 ON 17 DEC 2003) SET COST OFF

FILE 'REGISTRY' ENTERED AT 13:51:48 ON 17 DEC 2003 E C20H22CL2O4/MF

L1 3 S E3 AND 46.150.18/RID AND OC4-C6/ES SEL RN

L2 0 S E1-E3/CRN

FILE 'HCAOLD' ENTERED AT 13:53:06 ON 17 DEC 2003 0 S L1

FILE 'USPATFULL, USPAT2' ENTERED AT 13:53:07 ON 17 DEC 2003 L4 0 S L1

FILE 'HCAPLUS' ENTERED AT 13:53:10 ON 17 DEC 2003

L5 1 S L1

L6 1 S (WO2000-EP9323 OR DE99-19948129)/AP,PRN

E FISCHER R/AU

L7 1150 S E3-E24

E FISCHER REINER/AU

L8 154 S E3

E ERDELEN C/AU

L9 303 S E3, E4, E7-E11

E BAYER/PA,CS

L10 43841 S E3,E4

L11 2548 S BAYER?/PA,CS NOT L10

L12 2 S L1, L6 AND L7-L11

SEL RN

FILE 'REGISTRY' ENTERED AT 13:55:50 ON 17 DEC 2003

L13 307 S E1-E307

L14 304 S L13 NOT L1

L15 1 S L14 AND NC5/ES AND NCNC2/ES AND 2/NR

L16 1 S L14 AND NCSC2/ES AND NCNCOC/ES AND 2/NR

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L17
               1 S L14 AND NCSC2/ES AND NC5/ES AND 2/NR
L18
               1 S L14 AND NCSC2/ES AND NCNCNC/ES AND 2/NR
L19
              2 S L14 AND NC5/ES AND 1/NR AND 4/N AND 1/CL
                 E C10H11CLN4/MF
L20
              8 S E3 AND NC5/ES AND 1/NR
L21
              7 S L20 AND 6 CHLORO
L22
              6 S L21 AND 3 PYRIDINYL METHYL
L23
               4 S L22 AND ETHANIMIDAMIDE
L24
              3 S L23 NOT T/ELS
              2 S L24 NOT 162551-23-7
L25
L26
              1 S L14 AND OC4/ES AND 1/NR AND 4/N
              1 S L14 AND NCSC2/ES AND 1/NR AND 5/N AND 1/CL
L27
L28
              9 S L15-L19, L25-L27
                SEL RN
L29
            505 S E1-E9/CRN
L30
              4 S L29 NOT MXS/CI
L31
              1 S L30 NOT C3/ES
L32
             10 S L28, L31
     FILE 'HCAPLUS' ENTERED AT 14:05:23 ON 17 DEC 2003
L33
           1592 S L32
L34
           6273 S DINOTEFURAN OR MTI446 OR MTI 446 OR ACETAMIPRID# OR MOSPILAN#
L35
           5372 S ADVANTAGE FLEA ADULTICIDE OR BAY NTN()(33893 OR 33 893) OR CO
L36
            135 S AKD 1022 OR AKD1022 OR CGA322704 OR CGA()(322704 OR 322 704)
L37
             45 S ADMIRE
L38
          11747 S L33-L37
L39
              0 S L5 AND L38
L40
              1 S L6 AND L38
     FILE 'REGISTRY' ENTERED AT 14:10:27 ON 17 DEC 2003
L41
              1 S 148477-71-8
              1 S 332121-89-8
L42
L43
              1 S 332154-06-0
L44
                STR
L45
             50 S L44
L46
           1484 S L44 FUL
                SAV L46 LEVY089/A
     FILE 'HCAPLUS' ENTERED AT 14:13:07 ON 17 DEC 2003
L47
            403 S L46
L48
              8 S L47 AND L38
L49
              1 S L48 AND (PD<=19991007 OR PRD<=19991007 OR AD<=19991007)
L50
              1 S L48 AND (PD<=20000925 OR PRD<=20000925 OR AD<=20000925)
L51
              2 S L49, L50, L12
L52
              7 S L48 NOT L51
L53
             16 S SPIRODICLOFEN#
L54
             20 S L41
L55
              4 S L53, L54 AND L38
L56
              1 S L55 AND ACETYLCHOLINE RECEPTOR
L57
              2 S L51, L56 AND L5-L12, L33-L40, L47-L56
L58
            259 S L7-L11 AND L5, L6, L38, L53, L54, L47
L59
              6 S BAJ2740 OR BAJ 2740
L60
              0 S L59 AND L38
L61
            210 S L58 AND L38
L62
              3 S L61 AND L47, L53, L54, L5
L63
              4 S L57, L62
                SEL HIT RN
     FILE 'REGISTRY' ENTERED AT 14:23:48 ON 17 DEC 2003
L64
            297 S E10-E306
L65
              3 S L64 AND L1
              8 S L64 AND L32
L66
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2 S L32 NOT L66

L67

```
10 S L66, L67
L68
L69
             1 S L64 AND L41
L70
            285 S L64 AND L46 NOT L65-L69
            282 S L70 AND 1/NC
L71
L72
              3 S L70 NOT L71
              2 S L72 AND MXS/CI
L73
     FILE 'HCAPLUS' ENTERED AT 14:26:47 ON 17 DEC 2003
L74
              1 S L73
              4 S L63, L74
L75
     FILE 'REGISTRY' ENTERED AT 14:27:10 ON 17 DEC 2003
     FILE 'HCAPLUS' ENTERED AT 14:28:41 ON 17 DEC 2003
     FILE 'USPATFULL, USPAT2' ENTERED AT 14:30:11 ON 17 DEC 2003
L76
              0 S L1
L77
             93 S L46
              2 S L41
L78
L79
              0 S L42, L43
L80
              9 $ L53 OR L59
            102 S L76-L80
L81
            260 S L32
L82
          33351 S L34 OR L35 OR L36 OR L37
L83
             54 S L81 AND L82, L83
L84
L85
             43 S L84 AND (PD<=19991007 OR PRD<=19991007)
             43 S L85 AND (SYNERG? OR MIX? OR BLEND? OR COMBIN? OR CONCURRENT?
L86
             41 S L86 AND SYNERG?
L87
              1 S L77 AND L82
L88
L89
             0 S L85 AND L82
             43 S L85-L87 NOT L88
L90
    FILE 'USPATFULL, USPAT2' ENTERED AT 14:37:58 ON 17 DEC 2003
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